The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1601.—Vol. XXXVI. LONDON, SATURDAY, APRIL 28, 1866. {STAMPED.....SIXPENCE. UNSTAMPED..FIVEPENCE.

MR. JAMES CROFTS, SHAREBROKER,
No. 1, FINCH LANE, CORNHILL.
(Established 23 years.)

Mr. Crofts has for some time past devoted much attention to shares dealt in on the Stock Exchange, but more particularly to those in the list called "Miscellaneous," which comprises the most popular investments of the day, such as Credit Foncier, General Credit and Finance, Imperial Mercantile, International Financial, Overend, Gurney, and Co., Fore Street Warehouse, and many others suitable to the fancy or convenience of purchasers. Besides, however, transacting the business, Mr. Crofts is prepared to give advice as to the nature or merits of individual concerns, which he suggests should be asked before the purchase is made, in order that the enquiry may result in the avoidance of unsafe business.

Imperial Welsh Slate Company (Limited).—Prospectuses and forms of application may be had of Mr. Crofts, and samples of the produce of the above quarries seen at his office. Early applications for the shares are recommended.

Mining Shares to Buy.—Frank Mills, £9; East Lovell, £9; North Treskerby, £2 19s. 6d.; Prince of Wales, 4s. 9d.; Chontales, 1¼ prem. (£2 paid); Frontino and Bolivia, dis. (25s. paid); Wheal Buller, £16; East Laxey, 35s.; Clifford, £11; Chiverton Moor, £5¾, very safe, and not likely to remain long at the price.

N.B.—SELLER of 20 Imperial Mercantile, 3¼ dis., or £1 15s. per share (£5 paid).

Bankers: National Bank of Scotland, Finch-lane.

MR. JAMES LANE, No. 44, THREADNEEDLE STREET, LONDON, E.C.

James Lane has FOR SALE at nett prices:—10 Bedford United, 24s.; 60 Bettle Hill, 5s.; 50 Crebor, 12s. 9d.; 10 Chiverton, £6⅝; 50 Cape Cornwall; 30 Caldbeck Fells, 20s.; 20 Chontales, £3¼; 5 Clifford, £10½; 25 East Caradon, £7¼; 20 Drake Walls, 11s. 6d.; 50 East Jane, 7s. 6d.; 10 East Carn Brea, £3⅝; 50 East Grenville, £2⅝; 10 East Rosewarne, 32s.; 10 East Lovell, £8⅝; 10 Frank Mills, £5⅞; 20 Frontino and Bolivia, £1¼; 20 Great Caradon, 5s.; 20 Great Busy, 16s.; 10 Great Laxey, £21½; 30 Great North Laxey, 41s.; 20 Hallenbeagle, £1½; 50 Lady Bertha (offer wanted), 10s.; 5 Great Vor, £23¾; 10 Marke Valley, £4½; 20 North Treskerby, £3; 25 New Wheal Lovell; 5 North Roskear, £5¼; 25 Prince of Wales, 5s. 6d.; 200 Rossa Grande, 1s. 6d.; 10 South Darren, £3 1s.; 20 Rosewarne United, 16s. 6d.; 100 Royalton, 10s. 6d; 20 Rosewall Hill and Ransom United; 20 Rosewarne Consols, 30s.; 50 St. Just United, 17s.; 5 Spearne Moor, £5; 20 South Condurrow, 36s.; 3 South Crofty, £15; 10 Trencrom, £3¼; 200 Vale of Towy, 1s.; 15 Wheal Grylls, 20s.

MR. LELEAN (Member of the Mining Exchange) BUYS and SELLS all descriptions of ENGLISH and FOREIGN STOCKS and SHARES, INSPECTS MINES, and TRANSACTS all the usual BUSINESS of a STOCK and SHAREDEALER. Parties may rely upon him for sound advice and punctuality in all his engagements.

Bankers: Robarts, Lubbock, and Co., Lombard-street.
11, Royal Exchange, London, E.C.

MR. LELEAN'S STOCK, SHARE, AND FINANCE REGISTER for May, to be published on the 2d prox., should be consulted by all who wish to make safe and profitable investments, giving 10 per cent. and upwards; to review the state of the markets for the preceding month; and to see the appreciation in the shares and capital of British mining companies. Single copies, 6d. each; annual subscription, 5s. Published monthly, and sold by Messrs. Pottie and Son, 14 and 15, Royal Exchange, London, E.C.

MR. LELEAN recommends the immediate purchase of Great Laxey, Central Snailbeach, Rosewarne Consols, Treiyon, Wheal Margery, East Laxey, Great North Laxey, and Great South Chiverton.

Mr. Lelean refers correspondents to his communication in this day's Journal, p. 261.
11, Royal Exchange, London, E.C., April 27, 1866.

GEORGE RICE, SHAREDEALER, 5, COWPER'S COURT, BIRCHIN LANE, LONDON (23 years' experience), Member of the Mining Exchange, DEALS in MINING SHARES at close market prices of the day, either as BUYER or SELLER, for cash or account.

George Rice's recent recommendations of several mines for a great rise in price have been fully confirmed; there are a few others still overlooked, which he can confidently recommend for a great and immediate rise.

George Rice is not in the habit of publishing his views upon the merits or demerits of the various mines now before the public, but he is always prepared to advise his clients when to buy or sell to their advantage, and in many mines he is prepared to share profit or loss upon his advice.

SPECIAL BUSINESS in the gold mines, at close prices.
An OFFER WANTED for 50 Okel Tor.
Money advanced on mining shares.
April 27, 1866. Bankers: Bank of London.

WILLIAM SEWARD,
19, THROGMORTON STREET, LONDON, E.C.

MESSRS. McNEILL AND LONG, STOCK, SHARE, AND MINING DEALERS,
7, POPE'S HEAD ALLEY, LOMBARD STREET, E.C.
Bankers: Alliance Bank.

MR. J. W. HUTCHINSON, 78, OLD BROAD-STREET, and MINING EXCHANGE, LONDON, E.C., DEALER in MINING and OTHER SHARES, also in those temporarily unsaleable.
Bankers: City Bank.

MESSRS. THOMPSON AND CO., SHAREDEALERS, 7, BISHOPSGATE STREET, LONDON, recommend an immediate purchase in Clowance Wood Mining shares, as the best speculation in Cornwall. Special and latest reports, and information, forwarded on application.
Pedn-an-drea and Sparnon shares are also recommended.
Stocks and shares of every kind bought and sold.

MR. JAMES HUME, 74, OLD BROAD STREET, LONDON,
(Member of the Mining Exchange).

	Closing prices.		Closing prices.
Chiverton Moor	£1¼–£5	South Condurrow	£1¾–£2
East Caradon	7 – 7⅛	East Carn Brea	3⅛– 3⅛
East Grenville	2⅛– 2¾	Clifford	10⅛– 11⅛
Chontales	1 – 1⅛ pm.	Frontino	⅛ dis. to par.

Mr. Hume transacts business in all shares dealt in on the Stock Exchange, at closest margins. Bankers: The London Joint-Stock Bank.

MR. T. ROSEWARNE, 81, OLD BROAD STREET, LONDON, E.C., has BUSINESS to TRANSACT in all the LEADING MINES in DEVON and CORNWALL.

T. Rosewarne has returned from his tour of inspection in Devon and Cornwall, and is enabled to advise his friends what to buy during the present depressed state of the mining market. Many mines which are safe to pay cent. per cent. this year.

WANTED TO BUY, any part of 500 Frontino and Bolivia, 50 Gawton, 150 Caldbeck Fells, 70 North Treskerby, 500 Penhale and Lomax, 500 Prince of Wales, 100 North Grambler, 100 Gunnislake, 10 Botallack, 50 Hingston Down, 50 Frank Mills, 5 Wheal Seton, 50 Bedford United, 50 Craddock Moor, 100 Cape Cornwall, 100 New Clifford, 20 North Roskear, 50 St. Just Consols, 10 West Caradon, 100 Wheal Norris, and 200 Mineral Rights.

An OFFER WANTED for Great East Lovell, 50 'Bronfloyd, 20 Chiverton, 40 Central Minera, 10 Cargoll, and 50 Hallenbeagle.

Money advanced on marketable mining shares. Office hours, Ten till Four.
Bankers: Bank of London.

MR. JOHN BATTERS, STOCK AND MINING SHAREBROKER, 13, THROGMORTON STREET, LONDON, E.C.

The Zacatecas Silver Mining Company (Limited).—Intending investors, who wish to have an interest in this valuable property, should apply immediately to Mr. Batters, who will not only secure them a full allotment, but furnish every information free on application. The numerous disappointments that must attend the applicants for shares in the Mineral Rights Association will show the necessity for an immediate application for the above, as the shares to be allotted in full are rapidly being filled up.

MR. WALTER TREGELLAS, 122, BISHOPSGATE STREET WITHIN, continues to deal, at close market prices, in all good sound DIVIDEND and PROGRESSIVE MINES, either for cash or the account.

W. Tregellas strongly recommends the Taquarli Gold Mining Company. Prospectuses, and full particulars, can be had on application.

BARRETT AND CO., No. 9, SPRING GARDENS, CHARING CROSS, and No. 75, OLD BROAD STREET, CITY, are PREPARED to GIVE EVERY INFORMATION on BRITISH and FOREIGN MINES, and have a large number of SHARES FOR SALE, which will pay from Fifteen to Thirty per cent. Their "Investment Review" can be had on application, and contains some of the safest and best securities in Mines, Railways, Eastern and Indian Stock, &c.

MR. GEORGE BUDGE, No. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C. (Established 18 years), has FOR SALE:—40 Yudanamutana; 15 Quebrada, £5¼; 200 Don Pedro; 2 West Sharp Tor, £40; 70 South Callington; 40 Gawton, £3; 100 Dale, 6s.; 50 Chontales; 60 Camborne Vean, 17s.; 80 United Mexican; 30 East Rosewarne, 32s.; 2 Minera; 50 Caldbeck Fells; 40 Alamillos, £2; 200 Rossa Grande; 80 East del Rey; 50 Frontino and Bolivia.

STOCK EXCHANGE SECURITIES.

Railways.	Banks.	English Funds.
Financial.	Foreign Funds.	Discount.
Steamship.	Loan.	Docks.
Ironworks.	Gas.	Water Works
Insurance.	Telegraph.	Hotel.
Marine Insurance.	Land.	Irrigation.
Foreign Mines.	Cornish Mines.	Devon Mines.

And other public companies.

MR. PETER WATSON, STOCK AND SHAREDEALER, begs to state that every information respecting any of the above companies may be had on personal application, or by letter, as to PURCHASES and SALES, with advice as to the most desirable investments.

From the close proximity of his offices to the Stock Exchange, and also the Mining Exchange, he is enabled to act with promptitude on all orders entrusted to him in the PURCHASE or SALE of every description of stocks or shares, at nett prices for cash or fortnightly settlements.

TELEGRAPHIC MESSAGES of customers to BUY or SELL in any of the above companies punctually attended to, at nett prices for cash or half-monthly settlements, at the closest posible market prices of the day.

Twenty-one years' experience.
(Two in Cornwall and Nineteen in London.)
Bankers: The Union Bank of London, and the Alliance Bank.

The present is an unusually favourable period for the investment of capital.

A SELECTED LIST of Railways, Banks, Financial, Foreign Funds, Steamships, Foreign and Cornish and Devon Mines, &c., sent on application, with special recommendations as to investments, &c., on the distinct understanding that any business resulting through his information or advice may be done through him.

MR. EDWARD COOKE, STOCK AND MINE SHAREDEALER, 2, CROWN CHAMBERS, THREADNEEDLE STREET, AND MINING EXCHANGE, LONDON, E.C.

Prospectuses of the Mineral Rights Association, and the Zacatecas Mining Company, to be had on application.

Chontales and Frontino and Bolivia shares dealt in, at close market prices.
Satisfactory references given in any town in the United Kingdom.
April 27, 1866. Bankers: Alliance Bank, Lothbury.

JOHN RISLEY, 32, LOMBARD STREET, and MINING EXCHANGE, LONDON, E.C., has SPECIAL BUSINESS in East Grenville, Wheal Buller, and West Caradon shares.

MR. WILLIAM MARLBOROUGH, 1, GREAT ST. HELEN'S, BISHOPSGATE STREET, LONDON, E.C. (Established 11 years), has FOR SALE the FOLLOWING SHARES, at nett prices:—

50 Wheal Grylls, 20s.	10 South Darren, £3 5s.	15 Crane, 10s.
40 Sithney Metal, 2s. 6d.	18 Gt. East Lovell, 5s.	4 Grambler, £3¼.
10 Wheal Agar, 10s.	30 New Lovell, 6s. 3d.	5 Vigra (offer wanted).
50 Chontales, £1 6 3 prem.	20 Wheal Uny, 16s.	60 Gt. No. Laxey, £2 1 3
80 Frontino, 27s. 6d.	50 North Chiverton, 30s.	8 West Caradon, £8.
75 Rosewarne Consols, 30s.	10 Clifford, £11¼.	25 Hingston, £4½ (ex div.)
20 Frank Mills, £5⅞.	50 So. Condurrow, 34s. 6d.	10 East Lovell, £8⅝.
70 Central Snailbeach, 30s.	100 Mineral Rights, ¼ pm.	100 South Grenville, 2s.
100 Great South Tolgus, 6s.	40 Gonamena, 21s.	5 East Basset, £17.
5 Buller, £17.	50 Wh. Grenville, [illegible] 6d.	60 Pendeen, 5s. 6d.
25 Chiverton Moor, £5¼.	5 Wheal Rose, £14⅛.	50 Caldbeck Fells, 21s.
35 Camborne Vean, 12s 6d	100 Prince of Wales, 4s. 6d.	30 East Grenville, £2¾.
2 Wheal Seton, £205¼.	50 Great Busy, 14s. 6d.	5 North Roskear, £7¼.
5 Stray Park, £5¼.	20 East Caradon, £7¼.	20 No. Treskerby, £2 18 9
55 Cefn Cilcen, 5s.	1 Nevada, £53.	1 New Seton, £30.

25 Alhambra Music Hall, £5 paid, guaranteed 15 per cent., at £5.

NORTH JANE MINE.—WANTED TO PURCHASE, ONE HUNDRED SHARES, for immediate cash.—Sellers will please state lowest price to Mr. William Marlborough, 1, Great St. Helen's, Bishopsgate-street, London, E.C.

SHAREDEALERS.—BARTLETT AND CHAPMAN, having extensive business as BUYERS and SELLERS of ALL KINDS of MINING and STOCK EXCHANGE SECURITIES, are always in a position to deal, at close market prices, free of commission, either for cash or the usual fortnightly settlement.
Bankers: Alliance Bank.

BARTLETT AND CHAPMAN'S "CIRCULAR" contains valuable information as to many mines worth purchasing at present prices, either for dividends or an immediate rise in their market value. Sent post-free on application.—2, Bucklersbury, London, E.C.

WANTED TO PURCHASE:—20 Great Laxey, 5 West Chiverton, 50 Great North Laxey, 50 Nangiles, 50 Rosewarne Consols, 20 North Treskerby, 100 North Jane, 20 Frank Mille, and 10 South Darren.—Sellers please state lowest price for cash to Bartlett and Chapman, 2, Bucklersbury, London, E.C.

WHEAL BULLER.—WANTED, an OFFER for a FEW SHARES.—Buyers will please communicate with Bartlett and Chapman, 2, Bucklersbury, London, E.C.

NOTICE OF REMOVAL.

MR. J. B. REYNOLDS has REMOVED to Nos. 70 and 71, BISHOPSGATE STREET WITHIN, LONDON, E.C., and continues to TRANSACT BUSINESS in BRITISH and FOREIGN MINES, RAILWAYS, BANKS, &c., and all securities dealt in on the Stock Exchange.

Mines—Business, cash or time.

Chontales.	Clifford Amalgamated.	Central Snailbeach.
West Sharp Tor.	Great North Laxey.	North Chiverton.
Great Vor.	Hollybush.	Dale (Limited).
Zacatecas.	South Callington.	Frontino (Limited).
Mineral Rights.	New Treburget.	Stray Park.
Bryn Gwiog.	Stray Park.	

Mr. Reynolds does not advertise shares for sale at fixed prices, but nevertheless is prepared to deal on as reasonable terms as those who do.

Mr. Reynolds has also business in the financial and other companies, including Credit Foncier and Mobilier, cash or time.—April 27, 1866.

DALE MINING COMPANY (LIMITED).—Mr. J. B. REYNOLDS has SPECIAL BUSINESS in these shares, both as BUYER and SELLER.—70 and 71, Bishopsgate-street Within, London, E.C., April 27, 1866.

MATTHEW GREENE, STOCK AND SHAREDEALER, ST. MICHAEL'S HOUSE, CORNHILL, LONDON,
Is always prepared to deal at close prices in mining, bank, and railway shares, &c.

Mr. Greene has FOR SALE:—

100 Frontino, 22s. 6d.	20 Reinnie Laxey, £1.	50 Snaefell, £1⅜.
20 Great No. Laxey, £2.	30 Bedol-Aur.	20 East Carn Brea.
50 East Snaefell, £2.	10 Cuddra.	40 South Condurrow, 35s.
20 East Laxey.	15 East Caradon, £7¼.	10 Adelphi Hotel, Liverpool.
100 Chontales (call paid), £3¼.	10 Great Vor, £23.	5 General Exchange Bank
	50 Caldbeck Fells, £1.	

Mr. Greene recommends New Clifford shares. See reports of Capts. J. Nancarrow and Michell, in this day's Mining Journal.

Money advanced on mining shares.
Bankers: Imperial Bank.
April 27, 1866. Office hours, Ten till Four.

MR. G. D. SANDY, STOCK AND SHAREDEALER, No. 48, THREADNEEDLE STREET, LONDON, E.C., TRANSACTS BUSINESS in EVERY DESCRIPTION of STOCK EXCHANGE SECURITIES, MINING and FINANCIAL ENTERPRISES, at close market prices.

Correct Daily Price List may be had on application.
Money advanced to any amount on legitimate stocks and shares.
References exchanged.

The selected list of mines recommended in the Circular of this month should be noticed by all.

Mr. Sandy's Circular for the present month is now ready, gratis.
Moore, McQueen, and Co. (Limited).—SHARES FOR SALE.

INVESTMENT, LOAN, AND BANK AGENCY.—Investments effected in Stocks, Shares, and other Securities, and 75 per cent. of the purchase-money advanced, if required, subject to quarterly or half-yearly repayments.

Deposits received in sums of £5 and upwards, and interest allowed thereon at the following rates:—

Payable at fourteen days' notice	6 per cent. per annum.
Ditto at thirty days' notice	6½ " "
Deposits for six months certain	7 " "
Ditto for twelve months, or longer	8 " "

Loans negociated on Public Securities having a market value, and every description of Bank and Money Agency business undertaken.

CHARLES PETERS, Secretary.
No. 12, Clement's-lane, Lombard-street, London, E.C.

MR. T. P. THOMAS, MINING AGENT AND AUCTIONEER,
3, GREAT ST. HELEN'S, BISHOPSGATE STREET, LONDON, E.C.

MR. T. E. W. THOMAS, MINING AGENT AND GENERAL MINING SHAREDEALER, 18, UNION CHAMBERS, UNION COURT, OLD BROAD STREET, LONDON, E.C.

Mr. Thomas has SPECIAL BUSINESS in North Dolcoath, North Minera, Wheal Hartley, Mary Ann, Minera (Wrexham), and Bedol-Aur (Holywell).

MESSRS. LANE AND GIBBS, 2, ROYAL EXCHANGE, LONDON, E.C., AND MINING EXCHANGE, STOCK AND SHAREDEALERS, AND FINANCIAL AGENTS, transact business in all kinds of securities at closest nett prices for cash or account.

SPECIAL BUSINESS in Chontales, Mineral Rights Association, Zacatecas, Frontino, and Caldbeck Fells, either as BUYERS or SELLERS, for cash or the fortnightly settlement.

Parties of respectability can have transfers registered into their names previous to payment. Daily price list on application.
Bankers: London and County Bank.

MR. FREDERICK WILLIAM MANSELL, STOCK AND MINING SHAREDEALER,
26, THROGMORTON STREET, and MINING EXCHANGE, LONDON.
Bankers: London Joint-Stock Bank.

WILLIAM MICHELL has the following SHARES FOR SALE, either for cash or for time on:—

50 Great North Laxey.	10 Great Wheal Vor.	15 Clifford.
150 Chontales.	100 East Grenville.	30 East Caradon.
And is a BUYER of—		100 North Treskerby.
100 East Russell.	20 Stray Park.	20 Bryn Gwiog.

Chontales ("A. B. C.")—If you will take my advice, you will not meddle with them for the present.

W——l G——e ("F. G. S.")—The present price of shares proves the correctness of my advice.

Bryn Gwiog.—Every information relative to this mine can be had at the office, and the books of the company can be seen by any shareholder from Ten A.M. to Four P.M.
Apply at 42, Cornhill, London, E.C.

PRO BONO PUBLICO.—There is really no justification for the present "panic-stricken" state of the Mining Share Market, and capitalists should lose no time in embarking for large profits. A judiciously selected list may be had on application, but Mr. Rye expects to be made the medium of any business in re-
Established in Cornwall and London Twenty-five years.
Bankers: Messrs. Robarts and Co.
References of respectability given and required.
77, Old Broad-street, and Mining Exchange. H. B. RYE.

NOTICE OF REMOVAL.

MESSRS. WARD AND JACKMAN, STOCK AND SHAREDEALERS, have REMOVED from 2, Adam's-court to No. 1, CUSHION COURT, OLD BROAD STREET, CITY, E.C.
Bankers: London and Westminster, Lothbury.

FOR SALE, for cash, the FOLLOWING SHARES, in good established mines:—50 Great North Laxey (Limited), £2 2s. 6d.; 100 Frontino and Bolivia (Limited), £1 6s.; 50 Caldbeck Fells (Limited, £1 paid), £1 1s. 6d.; 20 South Darren (Limited), £3 2s. 6d.; 200 Great Northern Copper Company (Limited, 31s. paid), 1s.; 10 Rosecliff and Tolcarne (Limited), £3; 50 Drake Walls, 10s. 6d.—Application for the whole, or any part, to be made to "E. W.," 30, South-street, Manchester-square, London, W.

WANTED, by the RUNCORN SMELTING COMPANY, CHESHIRE, FOUR MEN for DESILVERISING LEAD, and TWO others for "FLOWING POT AND FURNACE."

WANTED,—A PRACTICAL COPPER SMELTER for the CROWN COPPER WORKS, NEATH.—Application, with the necessary testimonials, to be forwarded to Mr. Francis Pryor, Claremont, Redruth, Cornwall.
April 23, 1866.

MR. EDWIN H. WADGE, for two years the chief representative of Harvey and Co., and manager of their extensive business, Clarence Chambers, Manchester, begs to inform his clients and friends that he has REMOVED to PLYMOUTH, a more central position, by which he will be enabled to acquire authentic information of all mining properties, and be better able to advise his clients than in Manchester, with correctness and punctuality. He will be also able to faithfully report the progress and real position of the mines in which they have embarked through him (Harvey and Co.)

Mr. E. H. Wadge has BUSINESS TRANSACTIONS with the FOLLOWING MINES:—

Marke Valley.	West Caradon.	New Wheal Martha.
Hingston Down.	Craddock Moor.	Frank Mills.
East Caradon.	Okel Tor.	South Exmouth.

A copy of his Monthly Circular can be had for 6d. Yearly subscription, 6s.

Mr. E. H. Wadge begs to state that he has NO BUSINESS CONNECTION WITH HIS BROTHER, Erwin Harvey Wadge, and that much annoyance and confusion have arisen from the very remarkable similarity in their names.

Address, Mr. Edwin H. Wadge, South of England Mining and Engineering Offices, 9, Crescent-place, Plymouth.

MR. THOS. THOMPSON, MINING OFFICES, 12, OLD JEWRY CHAMBERS, LONDON, E.C.

OFFICES OF
THE GREAT LAXEY MINING COMPANY (LIMITED).
THE SNAEFELL MINING COMPANY (LIMITED).
THE EAST SNAEFLL MINING COMPANY (LIMITED).
THE EAST LAXEY MINING COMPANY (LIMITED).
THE REINNIE LAXEY MINING COMPANY (LIMITED).
THE CENTRAL SNAILBEACH MINING COMPANY (LIMITED).

MR. J. P. ENDEAN, SHAREDEALER, &c., of 25 years' experience, DEALS, and NEGOCIATES the SALE and PURCHASE of SHARES in Mines, Banks, Hotels, Water-works, Bridges, Canals, and every other marketable security, at nett prices, for cash or the fortnightly settling.
5, Finsbury Chambers, London-wall, E.C.

THE BRITISH AND FOREIGN MINING AGENCY, AND GENERAL INVESTMENT OFFICES, No. 5, FINSBURY CHAMBERS, LONDON WALL, LONDON, E.C.

JOSEPH TAYLOR AND CO., FINANCIAL, MINING, AND GENERAL AGENTS, 17, CROSS STREET, MANCHESTER.
DEALERS in MINING and OTHER SHARES.

JAMES WALTON, MINING BROKER AND FINANCIAL AGENT, 9, QUEEN SQUARE, BRISTOL.
OFFICES OF THE BOLINGEY HILL MINE.

MESSRS. C. THOMAS AND CO., CIVIL AND MINING ENGINEERING OFFICES,
POOLFOLD CHAMBERS, CHAPEL WALKS, MANCHESTER,
AND REDRUTH, CORNWALL.

BEARDWOOD, JONES, AND CO.,
17, CANNING CHAMBERS (Opposite the Custom House),
LIVERPOOL,
FORWARDING, COMMISSION, AND SHIPPING AGENTS.

Being intimately acquainted with the shipping of Iron, Hardware, Crates, &c., to all ports, we can offer superior advantages to Merchants and Manufacturers, both in low freights and moderate shipping charges. Marine Insurance effected.

ROBERT LIBBY AND SON,
MINE AND SHAREDEALERS, &c., CAMBORNE, CORNWALL,
Recommend the undermentioned mines for immediate investment:—

West Great Work.	East Lovell.	Wheal Trannack.
New Clifford.	Rosewarne United.	

The above mines are quite safe for a great rise in price, and should be bought immediately. Mines inspected by competent agents.

BRITISH AND FOREIGN INVESTMENT.—Mr. THOMAS SPARGO, 224, and 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C., TRANSACTS EVERY DESCRIPTION of BUSINESS in the PURCHASE and SALE of SHARES in BANKS, CANALS, MINES, RAILWAYS, BRIDGES, INSURANCES, and ALL OTHER DESCRIPTIONS of BRITISH and FOREIGN STOCK.

Mr. Spargo has 20 years' experience of mining, ten of which he was engaged in practical mining, and ten years he has transacted business in mining shares and stocks at 224 and 225, Gresham House, Old Broad-street, City, E.C.
Bankers: Bank of London.

Original Correspondence.

REMOVING GAS FROM COAL MINES.

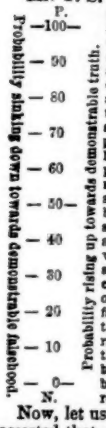
SIR,—In last week's Journal I find some remarks upon my invention for removing inflammable gas from coal mines by "M. E.," who admits there is room for great improvements in the ventilation of second and third class mines. I think the first-class should not be omitted, for we find that even they are not exempt from their share of accidents—for instance, the Risca and Gethin explosions. Now, I am under the impression that few if any colliery proprietors would acknowledge their works to be any other than first-class. I have conversed with many, and all say their systems of ventilation are perfect, and that they do not allow accumulations of gas to take place. Now, I ask why are there any explosions? "M. E." states that my method is "daily acted upon in a more useful and practical manner;" also, he says, where currents of air are weak there are almost certain to be accumulations; which is, of course, an admission that the drifts and galleries are inefficient. Now, I have not met with anyone who has ever heard of a gas syphon, and if such has been the case it ought to have been investigated before. Scientific gentlemen, many of whom have been connected with fiery mines, and in whose presence I have exhibited my experiment, have cordially approved of it, and have pronounced it to be a successful method of removing accumulations of gas; and I have proved it myself in a coal mine where a dumb drift was used. The rise above the top of the orifice of the drift contained many thousands of cubic feet of gas, which I removed much faster than it generated. I most respectfully ask "M. E." which would be the most economical way of removing that accumulation—my syphon, or cutting galleries to clear it? It took me only nine hours to erect my apparatus on the top of the pit (100 yards deep) and take my pipe into the goaf, and in fifteen minutes the gas was flowing freely out of it. As I have before stated, I have no wish to interfere with the present mode of ventilation, which has been partially successful. I think "M. E.'s" suggestion in reference to sub-inspectors a very sensible one, inasmuch as they would be useful in finding out those accumulations, and taking proper means for their removal. From the valuable articles from "M. E." which I have seen in the *Mining Journal* from time to time on colliery management, and other matters, I imagine him to be a gentleman of great practical experience, and whose opinion on this subject would be of great value, if he would take the trouble to make the experiment for himself, a full description of which he will see in the Journal of April 14, and any further explanation I should be most happy to give him.

I have no interest in thus bringing the matter so continually before the public, only it is annoying to me to see so many of the opinion that "something ought to be done," and yet when any plan is placed before them they will not notice it, but will write fluently upon the old systems, in face of the dreadful explosions which are so frequently occurring, and which will occur under those systems. I say now to "M. E.," as to others who seem interested in the subject, TRY MY METHOD, and if it prove contrary to my own and the assertions of those gentlemen who have witnessed its practicability, *then* is the time to denounce it as a failure, and I will let it rest, in hope that a better plan may be introduced for the prevention of such wholesale slaughter.—*Blaenavon, April* 24. J. G. WILLIAMS.

ON EXPLOSIONS IN COLLIERIES—HOW TO AVOID THEM.

SIR,—In the Journal of March 24 there was a short article from me on the subject of explosions, and how to avoid them. In that article I tried to point out some small things which I had not often seen touched upon by other writers—things which I knew, both from practical experience and from reading the various accounts of explosions in different parts of the kingdom, had played an important part in causing such dreadful accidents to take place. In the Journal of March 31 there appeared two short articles commenting upon and pointing out things where it was thought I had failed to make good my cause. The first is from "M. E.," of Newcastle-on-Tyne, and the second is from "J. M. R.," of Barnsley. First, then, in reference to the remarks of "M. E." He says I quite agree with Mr. Adcroft's views almost to the fullest extent, but not with the final conclusion. Well, when I come to reconsider, I see that I am rather too positive in my conclusions, for the propable is always possible, but the possible is not always probable. "M. E." comes to the conclusion that explosions will only become extinct when railway accidents become extinct. I have a higher hope than this, and think that the chance of preventing explosions is far better than that of preventing railway accidents.

Mr. T. S. Mackintosh once drew up a graduated scale of Probability, somewhat like that given in the margin, which appears to me would be a considerable help, and a good thing for reference, in the investigations of men upon all subjects of dispute. P is the positive or affirmative, and that is the end of positive truth. N is the negative end, or end of absolute falsehood. All demonstrations of truth take their place at the end, P, above 100, such as two and two make four, or any other truth of an equally incontrovertable nature; and all demonstrable falsehoods at the opposite end, N, beneath 0, such as three make one, and one three, or any other falsehood. All probable truths or falsehoods would take their place on the graduated scale at a higher or lower point, according to the higher or lower degree of probability of their truth or falsehood. A proposition which was supported by a degree of evidence which made it more likely to be true than otherwise would be placed upon the scale somewhere above 50, whilst one more likely to be false than true would be placed somewhere beneath 50. And, thus, probable truths or propositions which appear likely to be true might be classified and numbered according to their respective values on the scale. As, for example, the value of proposition A upon the scale is = 30, B = 37, C = 90, D = 65, and so forth. Absolute truth and absolute falsehood have no degrees of comparison. One probability may be greater or less than another; but one absolute truth cannot be more true than another, or one absolute falsehood more false than another. That two and two make four is a truth, and that three make one is a falsehood; and if the whole human race were to affirm the contrary, the first would still remain a truth, and the second a falsehood. To know a thing to be true is stronger than believing it and to believe a thing to be true is not to know it. Our belief may rise to 90, or even higher by a fraction, but then it cannot reach 100, for then it would no longer be belief but knowledge.



Now, let us apply the scale to the subject under consideration. I have asserted that explosions need not take place: this, I find, would require a knowledge of all the things connected with and the circumstances under which the mines will be worked through all coming time, but I find I cannot do this. I must, therefore, be content with putting it upon the scale, and as my belief is very strong, I shall place it somewhere above 90, railway accidents I should place about 65, and collieries worked with a mixture of lamps and candles I should place at 50.

"J. M. R." says I omitted to notice that miners themselves, in spite of all caution, often open and lock their own lamps in secret. Well, no doubt such things have taken place, but not so often as he seems to think; and where it has taken place I think it may be chiefly traced to a lack of keeping up that strict discipline amongst the men which is at all times necessary. He says in the present state of things it is next to impossible to enforce strict discipline in a colliery, owing to what he terms runabouts. There certainly are a great many of this kind of characters going about the country, but I have been connected with one of the most fiery mines for upwards of the last six years, and I have no doubt that there have been twice as many changes amongst the men as there have been at any other colliery in Yorkshire. We have had many of the lowest type of the mining classes, but I do not think there has been such a thing as a lamp opened during all that time.

I quite agree with "J. M. R." that each workman ought to give and receive a character from the place where he is working: but what is the reason of all this moving about on the part of the men? Is there not a fault somewhere else besides that on the men's side? I could point out collieries in the Barnsley district that give better wages than their neighbours, yet they never have a steady set of workmen. Is there a cause for this, or is there not? If there be not, then we have found that greatest of all anomalies in Nature—an effect without a cause. A knowledge of human nature and the good government of men is more required in colliery managers at the present day than any other quality. Men who have risen from the ranks of the workers mostly govern on the principle which they themselves have been governed; they neither look to the right hand nor to the left to see if there is not a shorter road to reach the desired end, but follow on in the old beaten tract of custom. A manager should be a man of strict consistency; he should be very cautious in his words, and never say anything which he does not intend to carry into practice: he should not pander to the whims and fancies of a part of his workmen because they flatter or in some other way please his fancy. He should hold out the same measure of justice to all parties, be they Jew or Gentile. Human nature is a process which the prudent should study, and the wise direct and gather from the errors and follies of the past hope and counsel for the future.

"J. M. R." says if a colliery is not safe to be worked with a Davy amp, it is not fit to be worked with any kind of light. I think I have somewhere stated that in every mine the very best possible system of ventilation should be introduced into it, and when this had been done put in Stephenson's lamps as an additional safety, but never use them as a substitute for bad ventilation. I give the preference to the Stephenson over the Davy lamp as being safer. The light in the Stephenson's lamp is more steady and not so flickering as that of the Davy. To use the words of a writer upon this point, he says the difference of the Stephenson's lamp over that of the Davy is a very important additional safety. The glass is a shield against the rapid currents of air or other gases; this was pointed out by Davy himself. Again, the prevention of the products of explosion of fire-damp from coming into contact with the flame of the lamp is so effectual by the glass, that no sooner is a Stephenson's lamp placed in an explosive mixture than these products—carbonic acid, steam, and nitrogen—are thrown back upon the flame, and immediately extinguish it; and when a sudden outburst of gas takes place, there is great danger when the miners are using Davy lamps if they should happen to begin to run at a rapid speed, and thereby drive the flame through the gauze. I think, therefore, we may put the Stephenson's lamp with regard to safety upon the scale at 90, while the Davy cannot claim a place higher than 55.

Barnsley, April 24. GEORGE ADCROFT.

COLLIERY EXPLOSIONS—HOW TO PREVENT THEM.

SIR,—Your correspondent, "M. E.," has, I presume unwillingly, afforded ample testimony to the desirability of some such system of special ventilation of coal mines as that advocated by Mr. Williams, whether applied in the goafs or in the working places. I think "M. E." will be enabled to call to mind instances where men have left their places apparently safe in the evening, and when they have returned in the morning a fatal explosion has taken place, which could not have happened if Mr. Williams's syphon had been at work. In second and third class mines, with weak currents of air, men need not work in an atmosphere where they can scarcely breathe if Mr. Williams's syphon be employed; and in the best ventilated mines, although divided into districts, and the drifts well swept by a strong current of air. Yet I have no doubt "M. E." might be able to point out instances where accumulations of gas have taken place, in spite of all the care taken, and which might have been easily removed by a syphon, which appears to be nothing but an application, yet a very notable one, of the general principle of natural ventilation, as acknowledged by "M. E." As to the advantage of "dumb-drifts," I think prevention better than cure. Explosions have taken place at the furnace, they may again, unless prevented by carrying the gas in some other direction than that of the furnace. SYPHON.

FREEING GAS FROM COAL MINES.

SIR,—Much has been said and written on the prevention of colliery explosions—various methods have been suggested—but still hundreds of our fellow-creatures are from time to time launched into eternity by such dreadful catastrophes; and is it not full time for persons in authority to do something effectual to prevent such fearful losses of life? Now, anyone acquainted with fiery mines must have observed the following facts:—

1. That explosive gas being lighter than common air, will ride upon it, or will travel with the same velocity; the air, therefore (when the yield of gas is large), cannot be mixed with gas so as to make it perfectly harmless.

2. Gas will always ascend and fill the highest workings.

3. That there are always large accumulations of gas in old workings, and where the pillars or supports are drawn out, passages or airways cannot remain unbroken, and, consequently, a circulation of air cannot be maintained to keep them free from explosive mixture, as air will always travel the shortest way.

4. That when an alteration takes place in the temperature—that is to say, when the weight or compression of the atmosphere diminishes—the gas pent up in old gobs and old workings expands and overflows into the new workings; perchance a small portion of it may move into the return passages.

Now, I admit that we have excellent systems of ventilation, but they are inadequate for very fiery mines, and some other method, in addition to the present one, ought to be adopted. I have endeavoured to show that gas will generate or accumulate where it is *impossible* to move it entirely by our present system; for instance, where large falls of the roof have taken place, and also in gobs and old workings; and if these places are not kept clear of gas, the loss of life, and damage done, in case of an explosion, in other ways, are a hundredfold.

I was invited a short time since by Mr. Williams, of Blaenavon, to examine an invention of his for the extraction of gas from coal mines (a notice of which I observed in the *Mining Journal* of April 14), and, taking all the facts that I have before stated into consideration, I firmly believe that by Mr. Williams's method a fiery mine can be kept constantly drained, and the risk of an explosion, if not wholly, would be very considerably reduced. By Mr. Williams's system, once put in operation, the gas will flow out of the mine as long as there is any gas remaining. His method has also this advantage over every other—the drainage of the face of progressive workings, without bratticing, and that of old workings, where the present system of ventilation cannot be introduced.

The difference of opinion between Mr. Adcroft and "M. E." (apparently both practical mine engineers) calls for a few remarks. The former gentleman, I find by his letter of February 19, states that he allows accumulations of gas to remain in old workings, simply because he cannot see any useful or practical plan for removing it. "M. E." states, in his letter in your last impression, that "passages are left through old workings, or round them in various ways, the purpose being to draw and carry away the gases." Now, if what "M. E." states is correct, why are not all fiery mines worked the same way? But so far as my knowledge extends, I cannot see any practical method of passing the air through old workings without fouling the general ventilation, or otherwise diminishing the supply for the progressive workings. Perhaps interested parties would kindly elucidate this mystery.—*Cardiff, April* 25. C. E.

EXHAUSTION OF OUR COAL FIELDS.

SIR,—The large amount of valuable information relative to the exhaustion of our coal fields, collected by the Geological Survey Department, is to be laid upon the table of the House of Commons, in reply to the questions of Mr. Liddell, on Monday, whether the attention of the Government had been directed to the rapid exhaustion of our coal fields; whether they were in possession of accurate information upon the subject which they were prepared to lay upon the table of the House; and, if not, whether they were prepared to direct that further scientific research be made into this very important question. The course which Sir G. Grey, as Home Secretary, has taken in the matter is one with which all must be well satisfied—he is willing that the country should be put in possession of all the reliable information which has been collected on the subject, but declines to make the comparative popularity which has been given to the question by the exertions of those who have an interest in propagating questionable theories or selling books the pretext for the appointment of extra officials to perform work already admirably done in existing Government departments. He states, as it was of course to be expected he would state, that the attention of the Government, in common with most other persons, has been directed to the alleged rapid exhaustion of our coal fields, and the statements made by many persons with regard to the probable time when they may be exhausted. But the Government is not in possession of any accurate information on the subject. He is not aware that any person is in possession of any information which may be called certain and accurate, but the Geological Survey Department has furnished a good deal of information on the subject, and upon this information he believes some of the statements which have been made are founded. The Government do not see that any advantage would be derived from any other parties independent of the Geological Survey Department being entrusted with the enquiry. If the papers relating to the Geological Survey were laid before Parliament in their present shape, he feared they would not be intelligible; but he would communicate with the department, and with their assistance he thought there would be no difficulty in extracting a considerable amount of information connected with the subject, which he would lay on the table of the House.

That the information thus promised will be highly interesting is beyond doubt, but too much importance as affecting the future of England should not be attached to it. From what has already been published it is certain that the fresh discoveries of coal within the past few years have increased in a ratio quite as large as the increase of the production, and it is equally certain that there are no grounds for supposing that the increase in the vend will continue at the same rate as for the last ten years. It is urged by those who were very properly designated in last week's Journal alarmists that the extent, depth, accessibility, and possible yield of the coal fields of Great Britain are known with sufficient accuracy for all practical purposes, and it is stated that in round numbers they will contain (down to a depth of 4000 feet, below which working them would be virtually too costly to be practicable) 80,000 millions of tons; and our consumption of coal in 1860 was about 80 millions. If, therefore, that rate of annual consumption were maintained, and not exceeded, our coal fields would last for a thousand years, and we might fairly dismiss all anxiety on the subject from our minds; neither legislators or philosophers need look so far ahead. Not only, however, has this rate been already exceeded, but consumption is increasing, and has long increased, at the rate of 3 per cent. per annum; and if this ratio of augmentation be continued—as without some check it certainly will—our coal fields, instead of lasting 1000 years, would only last 90 years at the outside. Moreover, this is an outside estimate, since it is based upon an assumption that coal mines will be worked down 4000 feet below the surface, whereas the deepest mine hitherto worked is only 2500 feet deep. In less than 90 years, therefore, if we continued at the present rate of progress, the supply of coal in Great Britain would be totally exhausted, would suddenly come to an end, and our manufactures, and commerce, and prosperity, and population would collapse altogether and at once. Practically, of course, this will not be the line of events. We shall be pulled up long before that time by the inevitable rise of price. As the demand for coal increases year by year, shafts will have to be sunk deeper and deeper, and each additional yard in depth will make the raising of the coal more costly, more difficult, and more dangerous, to a degree which no improvement in machinery and science can more than partially counterbalance, or can counterbalance long. The more rapid and signal the progress of our manufacturing industry and our commercial enterprise—that is, the greater our prosperity—the more vehement will be the demand for additional coal, and the more certain and the speedier will come that augmentation of price which, as we have shown, must infallibly first check and then destroy our manufacturing supremacy. At what precise period within the next 90 years this rise in price will, on the one hand, check our trade, and, on the other, the demand for coal, it is impossible to calculate; but that, if our progress continues, this period must come before very long appears absolutely certain. Our population, be it observed, increases nearly at the same rate as the consumption of coal, or, rather, would do so were it not for emigration; and support for this increase of numbers must be provided if we are to continue comfortable and prosperous by an extension of our manufactures. Practically, therefore—and this is the point to which we desire to direct special attention—the choice before us is this, and the future of Great Britain depends upon the choice we make and the course we pursue:—If we remain as we are, if we induce our whole annual increase of population to emigrate, and if we retain our manufactures and commerce at just their present magnitude and extent without further augmentation, then our coal fields may last a thousand years, and with them our prosperity—which depends on an unaltered consumption and a nearly unaltered price of coal—and we may continue indefinitely a comfortable and well-to-do nation of 30,000,000 of souls. If, on the other hand, we go on as we have been doing, push ahead at our current speed, and increase our manufactures so as to employ and feed our increasing population, then the loss of our industrial superiority over other countries, consequent upon the increased cost of production caused by a failing supply and an augmented price of coal, must come in time, and may come far sooner than we anticipate. The alternative lies between a stationary condition, with permanence, or rapid progress and transient greatness, entailing inevitable decadence and ultimate collapse.

Now, in the first place, there is no reason to conclude that 4000 feet is the limit of workable depth, although it is quite true that at present no mine has reached more than 2500 ft., because, inasmuch as at present we work at 2500 ft. quite as easily, if not more so, than we worked at 250 feet some few years since. With regard to the demand, it should be remembered that at least a large proportion of the coal now used is employed in the production of machinery for foreign countries, which will render the countries for which such machinery is intended independent of England, and that each year the countries to which English coal has heretofore been exported is by the application of English capital, skill, and machinery, rendered better able to dispense with English fuel and with British manufactures. If we would ascertain the probable duration of our coal fields, we must calculate the consumption and production of the whole world, the ratio of increase in each country, and the extent of the coal deposits in each.

April 23. CARBON.

GOLD AMALGAMATION—THE SODIUM QUESTION.

SIR,—The question has been raised in the *Mining Journal* as to whether Dr. Wurtz or Mr. Crookes is entitled to the credit of having suggested the use of sodium in the treatment of auriferous ores; but I think the question is far less limited. Is not the problem rather—Whether both have not derived their information from the old alchemical work, Schwartz's "Alchymia de Salabus," which was published some centuries before either of them entered the field as inventor? Nor is it to the ancient authors alone that one need look for reference to the use of sodium; it was mentioned in a catalogue of processes represented at a *conversazione* held at Mr. John Calvert's, in the Strand, in 1853. This exhibition was mentioned in the *Mining Journal* of July 23, 1853; and although, perhaps from the consideration that alchemy should be abandoned, the gold processes were passed over, there was undoubtedly exhibited models, books, &c., describing the arrastra, Egyptian gold mill, Roman gold mill; amalgamation with oxide of manganese, with chloride of sodium, with the admixture of alkalies, and large surfaces of electrically agitated iron balls or plates. But the point which most affects the question is the paragraph which follows, wherein Mr. Calvert mentions "amalgamation with the admixture of various metals with the mercury—copper or tin, or zinc, or the metal of salt (sodium), or magnesium," &c., and the note was even more explanatory, for it stated:—

"In the collection is an old Arabic manuscript, proving that the ancients were quite masters of the best process for dechloridising salt; and that they not only knew of the metal of salt (sodium), but its combination with mercury, and the affinity of that amalgam for gold. There is also a manuscript by Friar Rogeri Bacon upon the Metal of Salt, the Fire of Salt, &c. Other manuscripts, of no doubt a contemporary date, upon the Art of Salt, the Magic of Salt, the Fire of Salt, the Metal of Salt, &c. These old Latin treatises have less of the clouded mystery and humbug of such writers as Arnoldus, Agrippa, Hollandus, Ulysses, Borrichius, &c., and clearly show that they were masters of the process of the decomposition of salt and its metal (sodium), and, perhaps, even magnesium. In the same case is a transcribe of Bacon's 'Opus Minus,' written on vellum, done at Oxford by one Richard Totteli. A curious Spanish manuscript, of a more modern date, entitled the 'Sealed Secrets of Amalgamation,' by Alonzo Barba. This elaborately describes the various methods of amalgamation, and speaks of the great advantage to be gained by the admixture of certain metals with the mercury when the ores are foul with unclean matter."

Now, after such a publication as this, I cannot think that either Mr. Crookes, Mr. Vaughan, or Dr. Wurtz, will have any great desire to discuss the question—Who invented sodium? But I think it would be highly interesting if Mr. Calvert, or anyone who has the books and manuscripts at their disposal, would give the extracts as they stand in the originals, so that the world at large may know what has really been done in the matter.

Dover-street, April 23. T. C. J.

PEMBROKESHIRE SLATE.

SIR,—I wish that "Cambrian," or any others who may be disposed to disparage Pembrokeshire slate, would come and view the Cleddau and Millbroke Quarries, near Maenclochoo, owned and worked by Mr. John Thomas, of Haverfordwest. They would see veins of ample width, producing a green-grey slate, thin, even, ringing like a bell, and as strong as slate can possibly be, fetching at the quarries for the London market a price of 18*l.* and downwards per M, and not one-tenth part of the demand can at present be supplied. I have no interest in these quarries, past, present, or prospective; they are not, nor are likely to be, in the market, and I, therefore, have the less hesitation in mentioning them, and do so only because the subject of Pembrokeshire slate has been so much canvassed in your columns. J. F. N. H.

Haverfordwest, April 24.

PROOF OF SLATES BY FIRE, &c.

SIR,—I thank Mr. Harvey for referring me to the prospectus of the quarries of which he is manager, issued in 1863; I never had an opportunity of seeing or reading it. It is, however, of great advantage to the public that such points should be publicly mooted, because from the letter of an "Ex-Quarryman," also in the Journal of last week, it appears that so long as *twenty years ago* he heated some Pembrokeshire slates to redness in *a smith's fire*, and even bent them when hot, &c. Much, of course, depends on the heat of the fire to which slates may be exposed, or in the words of my letter inserted in the Journal of March 24, whether they will bear heat "in a blacksmith's fire to a degree that would melt iron, without cracking or flying while in the fire, and without calcining, decomposing, or even changing colour when they are taken out;" and I will now add, without undergoing any of these effects when taken out of the fire, and immediately immersed in the blacksmith's trough. I wish the blacksmith's fire to be made the test of this.

As I have before explained to you my inability to get a philosophical explanation of the heat-bearing power of some slates by means of analysis, you will, I am sure, allow me to throw out in your paper a simple suggestion, in the hope that it may fall under the eye of someone capable of carrying it into practical effect. I would then suggest, in the first place, that the purest and best roofing slate consists only of silica (flint) and alumina (clay). In using these terms, I a little simplify the scientific mineralogical terms. It is a well-known fact that the best and most durable slate is invariably got in close contiguity to beds of quartz (or flint) and that sounder slate is got below, where occasional little bunches exist on the surface, without extending to more than a yard or two in depth. The clay is a necessary compound in all slate, and I incline to think the only one which would not more or less deteriorate the value of slate-rock. Iron, a not uncommon ingredient, renders it too hard, while lime, magnesia, and manganese render it too soft. I know quarries in different places where these extremes prevail. Copper is less injurious, but it would also be much better out of the way. I am not aware that either lead or tin occur in the Welsh slate veins; I, therefore, put it as a suggestion—1. That the best slate is composed of silica and alumina alone.—2. That the best of the best is that in which silica gives the utmost durability to the slate, consistent with its even and regular lamination or cleavage.—3. That the great heat-bearing character of slates proceeds from this compound. I now leave this point at present, in order to see whether something may

not be eliminated from it for the public benefit by the insertion of this letter in the Journal.

In conclusion, let me ask a question of great interest to the public—Why do they not, when investing in slate quarries, turn to the Ordnance Map, made under the survey of the most eminent mineralogists in the kingdom, and there find the extent of the slate deposit, and how far it is intersected (if at all) by other deposits, which might even be of such a serious character as to render it valueless? This want of caution, and this alone, has produced much loss, while most extensive beds of sound slate find difficulty in gaining the attention they really deserve.

CAMBRIAN.

THE LONDON INSTITUTION.

SIR,—The annual meeting of the proprietors of this institution, held on Wednesday last, was very fully attended, and a determination was arrived at to preserve and improve the establishment. A proposition was made by the board of management to unite it to the Middle Class Corporation Schools. This, however, met with a spirited opposition, led by Mr. Alfred Smee, and it was finally withdrawn. I showed in your columns that the institution was financially much more than solvent, and there seems no good reason why it should not be made highly effective. In order to compass this, spirit and judgment are largely needed in its conduct and management. At present, the proceedings of the institution are simply unattractive. They do not conform to the altered spirit and varied wants of the times. The Society of Arts furnishes an example of what energy and tact may accomplish in these directions.

Surely there might be selected from among its 800 or 900 proprietors some who as managers would devote themselves to the glorious task of raising the falling fortunes of this institution, and who have the talent and the will to do it! At present, an atmosphere of mustiness pervades the interior of the building, which resembles the tomb rather than the birthplace of Wisdom—the grave rather than the cradle of Science. While all without is progressive, all within is stationary, if not retrogressive.

What is wanted, then, is an active and liberal-minded council, capable of moulding the institution to the tastes and wishes of the public; and not a somnolent one, dreaming of the glories of the past, but neglecting the demands of the present. It is a grand thing to have saved the institution from desecration; let the next step be to remodel its arrangements, and to increase its general usefulness. In spite of all changes, there remains at the east end of London a vast number of influential, scientific, and practical men, who would rejoice in and support the institution, were it only made what it ought to be—a Temple of the Arts and Sciences.

Royal Mint, Tower Hill, April 26. JOSEPH NEWTON.

PROSPECTS IN THE CHIVERTON DISTRICT.

SIR,—The prospects in NORTH CHIVERTON have greatly improved. I have long pointed out the more than ordinary chances of success likely to attend their researches, which opinion is being confirmed by the late discoveries, and also by the public, who are beginning to see that the time has arrived for investing in this kind of property, and those who make a judicious selection will ere long reap a rich reward. The new lode alluded to in my last is turning out well, being 3½ ft. wide, composed of silver-lead, blende, and the usual matrices generally accompanying rich lodes. In the 60, driving east on the old lode, a great improvement has taken place, which will, in my opinion, lead to important results. The lode within the last few days has improved to 8 cwts. of silver-lead and 1 ton of blende per fathom. This end is approaching a rich piece of mineral ground, and such, I venture to say, as cannot fail turning out large quantities of ore. The mine generally has improved; in a word, the largest sale of lead which has yet taken place will be effected in about three weeks, and little or no further calls will be required, so that the present low price of shares affords the investor a rare opportunity of doubling his money in a short time. In CHIVERTON MOOR the 40 has been driven over ore ground for 30 fathoms in length, and the present end, which is driving in the direction of the West Chiverton, improves as they advance towards those great deposits of ore. It must be understood that in this level the appearances are infinitely better than those presented in the same level in the adjoining rich mine. Although there is no perceptible difference in the composition of the rock through which the lodes traverse yet the ore is more thickly disseminated through the lode, and is, consequently, of more commercial value in this level. This was the case at the same depth in WEST CHIVERTON, leading one to infer that the main deposit, of which this run of ore ground is a sure precursor, will be reached in less time, and at a comparatively trifling expense. Suffice it to say, that the engine-shaft is now down to the intended depth for a 50, and a crosscut is in course of driving towards the lode, which will be seen in about a month from this time. This I consider is one of the most important points to come off in the county within so short a period; and should the lode increase in value (of which I have not the slightest doubt), as it did in the deeper development of West Chiverton, a similar rise in the value of this property must take place. I, therefore, say the public have not had such a chance of enriching themselves for a long time, and should they allow the opportunity to slip it will be no fault of— CHARLES BAWDEN.

St. Day, Cornwall April, 23.

EXPERIMENTS IN BLASTING OIL.

A series of experiments were on Tuesday made at the West Hoe Quarries, with a view to practically illustrate the value of a new explosive agent, known as Nobel's Patent Nitro-Glycerine Blasting Oil. The enormous power of nitro-glycerine has long been known to scientific men, but its practical utility for blasting purposes has not until recently been fully recognised. Now, however, we are told the objections to its use are being overcome, and that it is rapidly supplanting the use of gunpowder in many countries. The nitro-glycerine oil is a light liquid, of the specific weight of 1·6, is insoluble in water, and does not explode by simple contact with fire. It can be stored for an indefinite period, without loss of weight or any of its properties. It crystallises in cold weather, but reasumes its liquid form on the application of the requisite degree of heat; and it has this peculiarity, that it requires no tamping, a little loose earth or water being all that is required. Among the special advantages claimed for the nitro-glycerine oil is its cheapness, not so much with regard to the relative quantities of the material required to be used, as in the economy of labour in boring. At present, boring the blast-holes is the most expensive part of the operation, consequently the greater concentration of power which it is said it possesses is an advantage which will be appreciated by all engaged in quarrying, mining, or excavating works; and in this country, where such works are carried on to a greater extent than in any other, the cheapening of such operations has a most important bearing upon our national prosperity. In rapidity of blasting it has also an advantage—fissured rocks, and even clay, are easily blasted with it. In addition to this, it has a great superiority to gunpowder in its safety, as contact with fire does not cause it to explode unless confined, and, consequently, no danger arises from storing or handling. The experiments were made by Mr. E. J. Wood, the representative of the patentee, in presence of Col. Hicks, Capt. Moggridge, Messrs. J. E. Cahill, Walker, J. R. Hodge, Duke, T. L. Hodge, Marquick, Everett, T. Harvey, J. Hicks, J. Goad, S. Butler, J. Ash, E. Ash, &c.

The first experiment was in a 2 feet 6 inch hole, of 1½ inch bore, in a rock very little above the level of the ground. About 4 inches of oil, enclosed in a cartridge, was placed in the hole, and tamped in the ordinary way, and on being fired, caused the displacement of an immense mass of rock, but the full effects of the explosion were not apparent, being beneath the ground. The second experiment was tried in the solid rock, in a rather more elevated, and consequently more favourable, position. The hole was 2 feet 10 inches deep, and 1¾ inch bore, in which was placed 4 inches of oil, enclosed in a cartridge as before. The effect of the explosion was to blow out the rock, and to loosen the surrounding mass right and left to a considerable extent. There was also displacement of the rock beneath, but the extent could not be ascertained, as it was beneath the ground. The third experiment was intended as a comparison with ordinary blasting by gunpowder. It was on a large block of limestone, of about 25 cwts., the hole, which was 15 inches deep, being about 18 inches from the nearest edge. The oil, to the extent of 1½ inch, was poured into the hole, and tamped with loose earth, a piece of paper being first put in to prevent the earth mixing with the oil. The result of this blast was to shatter the stone to pieces. The fourth experiment was on a stone of similar size, though apparently harder, with an ordinary charge of gunpowder. The effect of this charge was to break the stone into three pieces. The fifth experiment, which was fired simultaneously with the last, was in the solid rock, about 3 feet from the face. Into a 3-feet hole, of 1¼ inch bore, was placed 3 ozs. of oil. In this case the hole was not tamped, but filled up with water. On the charge being fired, the rock in front was blown out, and a displacement caused to the depth of 6 feet. This experiment was watched with some interest, as it was considered a fair test of ordinary blasting, and the result was regarded as highly satisfactory by the scientific gentlemen present. All the holes in the above experiments were larger than would be required when the oil is used, and in this particular case Mr. Wood stated that a ¼-inch bore would have answered the purpose equally well, and that a much less quantity of oil would have effected all that was desired. The next and last experiment was on a much larger scale, and the preparations for it were only witnessed by some of the more adventurous, who climbed to the top of the quarry. The hole was 9 feet in from the face of the quarry, and 8 ft. 2 in. deep, the bore being 1¼ in., and 18 in. of oil was employed in the operation. Performing the same blast with gunpowder, it was estimated that ½ cwt. would have been required, and that three blasts would have been necessary. The preparation for this experiment occupied a considerable time; but certain arrangements had to be made which were unknown to the spectators underneath. At length the fuse was lighted, and in a few minutes an explosion ensued. At first it was thought the rock removed was not considerable, and that the experiment had not been so successful as had been expected, but a closer examination showed that the tremendous mass of rock in front of the charge—weighing, perhaps, 100 tons—had been blown completely out. This experiment was considered by those who were enabled to make special observations as to its result, a most satisfactory one, and as establishing all the claims put forward for the nitro-glycerine blasting oil. It is understood that some further experiments, similar to the last, are contemplated, to show what, under more favourable circumstances, may be accomplished.—*Western Morning News.*

Prof. Bottger indicates the following process for engraving, by aqua-fortis, meteoric stones, and rendering their structure visible. Nitric acid of 1·2 specific gravity is diluted with an equal volume of water, and the stone, previously cleaned and polished, is immersed in the liquid. The portions of the stone not required to be acted upon by the acid are covered with a varnish of asphalte, dissolved in benzole; also, the portion to be corroded by the nitric acid may be from time to time lightly passed over with a camel's hair brush, in order to facilitate the dissolution. After the lapse of five or six minutes the stone is withdrawn from the liquid and well washed, first in water, afterwards in a solution of carbonate of soda, so as to remove all acid. When it has become dry the stone is cleansed from the asphalte by turpentine, and varnished with a solution of paraffin in benzole, to prevent it from rust.

THE MINERAL RESOURCES OF NEW BRUNSWICK.

A preliminary report on the Geology of New Brunswick, by Prof. H. Y. Hind, has just been printed by the Provincial Legislature, and contains a vast amount of valuable information. Referring to the basin occupied by the carboniferous rocks, Prof. Hind states that, commencing at Bay Verte, in the county of Westmoreland, the elevation of the carboniferous strata above the sea, on the line of Major Robinson's railway survey, is 109 feet; the utmost elevation the country attains between this point and Shediac (always on the surveyed line) is 185 feet; there is then a very gradual descent to the Cocagne river, but immediately after passing this stream the country is broken, rising, before reaching Buctouche river, to 227 feet; near Coal Branch it is 259 feet, and between Harley road and the Richibucto river the country is nearly level, at an elevation of 170 feet above the sea, for a distance of ten miles, and one mile of that distance is absolutely level. There then succeeds a low dome-shaped rise and fall from 78 to 277 and 71 feet. Extensive level spruce barrens succeed, which are 21 miles across, terminating at the South-west Miramichi, the elevations of these barrens not exceeding 80 feet above the sea. Between the S.W. and N.W. Miramichi the dividing ridge is 225 feet above the ocean, and in the valley of the N.W. Miramachi another level tract of country occurs for 30 miles, the land rising only from 150 feet to 215 feet in that long distance. A descent is then made to the Nepisiguit, where the carboniferous strata terminate. The aggregate distance along the surveyed line, which is nearly straight, being 149 miles over the carboniferous series of New Brunswick. The route lies near the coast, varying from one to twenty miles distant; it exhibits, however, a remarkably level tract of country, and shows how few in number, and how gentle in action, have been the disturbances it has undergone.

The Great Eastern coal field of America covers a large portion of New Brunswick. The carboniferous area of the province is estimated to extend over 6500 square miles, a considerable part, however, being occupied by the lower carboniferous, or unproductive, coal measures. In the immediate neighbourhood of the Grand Lake the productive coal measures exist, although the flora shows that they are "tending to the upper formation." A great point is gained in having the age of these rocks sufficiently established to afford good ground for the belief that these productive measures may be found within the limits of the province in such development as to make them of considerable value. The supposed thinness of the New Brunswick coal field is opposed to the expectation that seams of workable coal will be found to occupy very wide areas, yet the structure of the country has been shown to support the view that in a bay or bays penetrating the carboniferous area from the east thicker seams than those which exist at Grand Lake (22 inches) may be sought for with a probability of success. Before Dr. Dawson had an opportunity of examining the flora from Bay Chaleur and Grand Lake, he expressed an opinion unfavourable to the existence of the productive measures in the province, qualifying it, however, with the observation that the valuable character of the Albert coal, however, and the well-known fact that coal measures often very materially in their productiveness, as we trace them from one locality to another, give some ground to hope that a carboniferous area so extensive as that of New Brunswick may not ultimately be found to be so unproductive as it now appears to be. The coal raised at Grand Lake from a 22-inch seam has hitherto been brought to market in a hap-hazard sort of way. There is no system whatever in mining it. Any farmer who finds the seam on his land employs persons to dig out a certain quantity of coal; this is brought up by agents, and shipped to Fredericton, Saint John, and elsewhere. It sold at Fredericton at $6½ a chaldron at the commencement of the winter of 1864-5, and it appears that about 5000 chaldrons were shipped from Grand Lake during the season. The quality of the coal is good, now that more care is taken to separate the lumps of iron pyrites, with which some portions of the seam abound. An American company has recently leased a tract of land on Grand Lake, and there is every probability that the supply will now be largely increased. The blacksmiths of St. John consider it very well adapted for their purposes, and prefer it to the imported coals. It has very little ash, and in a properly-constructed grate it makes an excellent fire.

After an admirable geological sketch of the province, are two excellent chapters upon the carboniferous series. The Great Eastern coal field of America covers a large portion of New Brunswick, the carboniferous area in the province being estimated to extend over 6500 square miles, a considerable part, however, being occupied by the lower carboniferous, or unproductive coal measures. It will be shown in the sequel that recent examinations of the flora of this series show that the middle carboniferous, or true coal measures, occupy a larger and far more important area than was formerly supposed, and it is by no means improbable that productive seams of coal will still be discovered, in localities which will presently be referred to. On reviewing what is known respecting the carboniferous area in New Brunswick, the following conclusions appear to be worthy of acceptance:—

1.—The entire rim of the central triangular area, the whole of the Tobique outlier, and the greater portion of the deep indent drained by the Kennebeccasis and the upper Petitcodiac rivers, belong to the base of the carboniferous series, and, consequently, do not contain any workable seams of coal. They abound, however, in limestone and gypsum; and the deep indent from Hillsborough to Norton contains a valuable deposit, and numerous favourable indications of other deposits of Albertite; also extensive and important beds of a highly bituminous shale, which may become valuable as a source of illuminating oil, and as a gas fuel for regenerating furnaces, and for metallurgical processes.—2. The country about and north-east of Grand Lake is occupied by the middle or productive coal measures, but whether they contain workable seams of coal more than 22 in. thick is a subject for future enquiry; the structure of the country leading to the inference that the productive coal measures will be found in force in the valley of Salmon River and the Richibucto.—3. A portion of the county of Westmorland contains the true coal measures, and it is not improbable that workable seams of coal may be found there.—4. What is known of the country near the coast north of Richibucto, leads to the inference that the upper or unproductive coal measures are in place there, and, consequently, that the probability of coal being found in workable quantities is by no means great.—5. The interior of the central area, on a line drawn from the bend of the Petitcodiac to the mouth of the Renous river, along the dividing ridge separating the waters flowing into the St. John from those flowing into the Gulf of St. Lawrence, is geologically unknown, and no definite conclusions can be drawn respecting it; but the dip of the rocks and the supposed absence of considerable undulations, with the occurrence of the lower coal measures tending to the upper, west of this line, point to the inference that the upper or unproductive coal measures are there in place. On the other hand, it may be urged that a fault or dislocations would bring the middle or productive coal measures into place. There is, however, no data upon which the existence or non-existence of a fault can be predicted. Hence the position of the central area remains still a *terra incognita*.—6. The borings which have been made at Grand Lake, and at New Bandon, show, if correctly registered (?), that no workable seams of coal exist below those which have been already discovered in those localities, as far as the borings have penetrated.—7. The thinness of the New Brunswick carboniferous series almost precludes the hope that what have been termed the false coal measures will be found in the lower rocks of the basin. In Pennsylvania these rocks (sub-carboniferous) have a thickness of about 5000 ft., and they contain, both in the State named and in Virginia, a few thin workable seams of coal. In Montgomery county, Virginia, there is a layer of coal 2 to 2½ ft. thick in these lower unproductive measures. But there is no reason to suppose that any rocks of the same age in New Brunswick contain seams of coal which approach that thickness, for, with the exception of the Albert shales, the general aspect of the red sandstones and conglomerates leads to the inference that life was scarce during their formation. It will be borne in mind that in America the productive or non-productive character of the different divisions of the carboniferous series is much more determined than in many parts of Europe, and the probability of workable coal being found is tolerably well indicated by the fossils of the rocks.

The chapter on the origin of Albertite and the Albert shales is very interesting. With regard to the latter, it is observed that they present many peculiarities. Some specimens which Prof. Hind took from the parent rock, near the Albert Mines, resemble a fine calcareous mud, stratified in extremely thin layers, each layer being separated by a coating of bitumen; he counted upwards of one hundred of these layers in an inch. The bitumen in the shales differs from Albertite; it ramifies through them in fine reticulating veins. The shales which occur near the Albert Mines differ from the bituminous shales in which the Albertite is found in this respect, that they appear to be the uppermost beds of the formation, and to contain a much larger amount of bitumen; a ton of these shales would yield upon distillation from 60 to 90 gallons of crude oil. They seemed to have been formed in a shallow tranquil tidal estuary, into which springs of petroleum were discharging themselves; they were, subsequently, much folded by pressure, and received an additional supply of bitumen by injection under pressure, hence the minute veins which ramify through fractures filled with Albertite. They must not be mistaken for the oil shale or oil coal of the Fraser Mine, in Nova Scotia, which lies geologically far above the Albert shales, and occupies a position within the true coal measures; nor with the earthy bitumens which are found within the same geological limits.

The remaining chapters are devoted to the consideration of the Devonian and Silurian (upper, middle, and lower) series; of surface, geology, and of the economic materials in the drift; and in these are highly valuable accounts of the metalliferous ores which occur in them. An abstract of these will be given in next week's Journal.

AUCHENCAIRN HEMATITE MINES.—Mr. John Calvert, C.E., has just inspected these mines, and reports that they are situated near the village of Auchencairn, Kirkcudbright, and within a very short distance of the sea, where there is a good harbour for shipment. The great iron lode runs nearly north-west and south-east; it has been traced about four miles to north-west and about one and a half to the south-east from the site of the engine-shaft, at which point it measures 84 ft., and is composed of—first, a band of hematite (kidney ore, see analysis 19,234); next, compact oligist (see analysis 19,235) and hematite ore (black metal) about 3 ft. thick; then, about 40 ft. of jasper and quartz (vein stone, see analysis 19,236), much veined and spotted with hematite; then a patch of the country—sienitic granite, decomposed and mixed with hematite and sulphate of barytes; and next a rich band of hematite (see analysis 19,237), about 2 ft. in thickness. This great lode has followed a band of sienitic granite, and is walled in on the north side by a vein of greenstone, which dips gently towards the lode and in depth; as the greenstone makes against the lode it will improve its character, and hematite will take the place of the jasper and quartz. This lode should be opened up in several spots, or the works now in progress carried out so as to allow of room to put on sufficient men to bring the yield up to 1500 tons per week. Furnaces should be erected, as, besides the saving in the extra carriage, there are large heaps of iron ore (refuse waste) that would not pay to ship, as well as much of the jasper lode stuff, which would then become available, and might be mixed with great advantage with the rich hematites. I was much pleased to find the steam-engine and all the works in good order, under the able management of Mr. Joseph Henderson, whose plan for developing this magnificent iron lode is the right one, and the company cannot do better than adhere to it. When we consider the rich and pure nature of this ore (being quite free from sulphur and phosphorus), the unlimited supply which may be obtained from a lode of such dimensions, and the growing demand for hematite pig, which is so suitable for the steel processes there, leaves no doubt as to the enormous profit to be derived from such an undertaking, which profit must increase every year as the works progress and the ore becomes more easy of access, but I strongly recommend furnaces to be erected on the spot, if only to convert the enormous bulk of waste, which would be a great boon to some iron districts, where the ore now used is even inferior to the heaps of waste lying about at the Auchencairn Iron Mine.—[A series of four analyses is appended, showing the nature of the ores, which Mr. Calvert considers to be of about the same value as those of Cumberland and Westmoreland.]

DURHAM COAL FOR THE FRENCH NAVY.—The French Minister of Marine, we understand, has agreed, on the representation of M. Niboyet, the French vice-consul at Sunderland, to submit Sunderland coal to competitive experiments with the Northumberland steam coal, mixed with the Welsh coal in the usual manner, for use in the Imperial Navy. Should the experiments be successful, Sunderland coal will be place on the list for the French Navy.—*Newcastle Daily Chronicle.*

THE KILGETTY SILICA COMPANY.—Vice-Chancellor Kindersley has appointed Mr. G. Williams, accountant, to be the official liquidator.

Meetings of Public Companies.

CAPULA SILVER MINING COMPANY.

The annual general meeting of shareholders was held at the offices, Cannon-street, on Wednesday,—Mr. H. T. SANKEY in the chair.

Mr. G. F. SMITH (the secretary) read the notice convening the meeting.

The report of the directors stated, owing to the hardness of the ground, and the increase of water in the main shaft, the progress made in sinking the mine deeper has been less than was anticipated. Eight varas have been sunk below the adit, and a branch of rich silver ore has been met with on the north side of the shaft, which is a part of the San Ignacio lode. At the commencement of Capt. Paull's management, in May last, it was found that the horse-engine, commenced by his predecessor, was on too expensive a scale, and that to complete it would entail a delay of many months, and a large expenditure; consequently it was thought prudent, at the suggestion of the manager, to send from England some necessary pitwork and other articles, and it is hoped that as these have arrived by this time in Mexico they would have the satisfaction of hearing that the manager had been enabled to continue sinking the shaft; and should he be able to sink only 22 varas (or 10 fathoms) more, he entertains the confident opinion that the company's success will be secured.—The Main Vein: The Esperanza adit level, west on this vein, has been driven 50½ varas (or 23 fathoms), of which 30 varas (or 13½ fathoms) have been driven through good silver ore, thereby verifying the expectation held out by the directors in their last report. The vein is 11 ft. wide, 2 ft. of which are in ores of a good ley, mixed with native silver. The end of this level is now under the Bomba shaft, to which a communication is to be made forthwith. The chief extraction of ore is from this level. San Enrique level east has been driven 69 varas (or 31⅔ fathoms), and the lode is all the width of the level, the whole of which will assay from 2¼ to 3 marcs per monton (or 15 to 18 ounces to the ton). The driving has been temporarily suspended, owing to the want of gunpowder. It is expected that the quality of the ore will improve as they get under the old workings of San Luis.—San José Vein: In a winze sinking on this lode, west of the shaft, two narrow branches of good ore have been met with, which appear to unite in depth, and when they come together an improvement may reasonably be expected. The San Ignacio lode has formed a junction with the above.—Nuestro Amo Vein: Some men have been put to sink on this vein, east of this shaft. A narrow branch of ore has been found, of fair quality.—San Onofre Winze: The ground here is rather hard, and the sinking has been interrupted by water. It contains some ore, but is suspended for the present.—La Bomba Shaft: The work to accomplish the desired communication between this shaft and Esperanza level is still going forward.—Silver Produce: The produce of the silver bars passed through the accounts is as follows: Tortas Nos. 1, 2, and 3, 334*l.* 0s. 1d.; ditto 4, 253*l.* 9s. 9d.; ditto 5, 232*l.* 6s. 6d.=819*l.* 16s. 4d. By the last report they had not received the result of torta No. 6. Tortas 7 and 8 are in course of preparation. A much larger return of silver would have been made had it not been for the scarcity of gunpowder for blasting purposes, and the want of salt and sulphate of copper for reducing the ores, and, as the deficiency of these article is not likely to occur again, they calculate on larger returns of silver in future, as the quantity of ores discovered is already large and rapidly increasing.

The CHAIRMAN moved that the report and balance-sheet be received and adopted. He called attention to the difficulties that had caused the delay in the development of the mine, but stated that they were now to a great extent overcome, and that the directors hoped shortly to hear that the pitwork sent from England had been found to meet the requirements of the mine. He also mentioned that the directors had it in contemplation to purchase a steam-engine—that is, supposing the present power proved insufficient to keep the water in fork. It was no doubt known to the proprietors that the works at the mine had been temporarily suspended, owing to the want of funds, and he (the Chairman) thought it would be better were he at once to speak of that matter rather than it should emanate from an individual shareholder. It arose in this way—the board having reason to hope that more ore would be reduced at the mine, and being anxious to delay making a call, decreased the remittances; they, moreover, felt less anxiety in taking this course from the fact that their colleague (Mr. Chynoweth) was in Mexico—that gentleman, having the confidence of the board, was in a position to obtain upon the spot any funds that might be necessary for temporarily carrying on the operations. He then alluded to the change of the manager, and stated that Capt. Paull had been appointed. He then moved that the report and accounts be received and adopted.——Mr. J. PHILLIPS seconded the proposition, but in doing so wished to state that while the directors were to be commended for their desire not to trench upon the company's funds, it was to his (Mr. Phillips) mind a most fatal policy to pursue to limit the financial operations to such an extent as to contract the necessary operations at the mine. Just now was the very time, when the mine was coming into a productive state, that energy and spirited management were required. As regards the engine, his recommendation was that the directors should in the first place write to Mr. Chynoweth and Capt. Paull to ask their opinion as to the advisability of sending out an engine. If they advised that course he (Mr. Phillips) would recommend a 14-in. cylinder horizontal engine, similar to those that had been sent out to Central America, France, and other places. It was an engine that worked admirably, and would be capable of taking their mine to a depth of something like 50 fms. below the adit level. He thought the total cost of such an engine, including freight, erection, &c., would be about 1500*l.* As regards the mine, it was satisfactory to observe that almost at every point there were indications of ore. The two important points were the Esperanza adit level and the shaft. The former, because it was upon the main lode, and was being driven into the hill, and the shaft because it was being sunk at a point from which the junction of the different veins was expected to be reached. From that level returns were now being made, and there was every prospect of those returns being increased—therefore, that was a most important point; and, further, as that level was being driven into the hill, the more the drivage was extended the higher would be "the back." If in that level the run of ore proved continuous, and of only a moderate value, the success of the company was ensured; but, at the same time, the shaft must be sunk to a depth of at least 50 fms., where the junction of the several large veins would, it was thought, be found.

Mr. SWAFFIELD said that he was perfectly satisfied with the character of the ground laid open, regarding it as an indication fully sufficient to justify the hope that when the junction was reached, if the mines were fairly and vigorously worked, shareholders would be amply repaid for the capital invested. In addition to the two points referred to by Mr. Phillips, about which he (Mr. Swaffield) had also most sanguine expectations, there was the La Bomba shaft, where he believed that something of considerable value would be met with. He hoped the directors would never keep the manager without sufficient funds to work the mine, under the idea that they would thereby force him to raise large returns; for if the exploratory works were not carried on, the mine must of necessity soon come to an end. He then enquired what proportion of the arrears of call had been received since December?

The CHAIRMAN said a large proportion had since been paid.

Mr. HILL suggested that the directors should have a small lithographic plan of the mine prepared, and a copy sent to each shareholder, and that the general meetings should be held half-yearly.

Mr. BELL said that, while the directors could have no possible objection to the adoption of the last suggestion, the shareholders knew from the monthly reports the progress that was being made at the mine.

A SHAREHOLDER considered that the report, upon the whole, was satisfactory; and if the directors had erred at all with respect to the funds it was upon the side of caution. (Hear, hear.) The balance-sheet was explicit, and the expenses of management appeared to be reasonable. He wished, however, to ask whether in that item there was included any remuneration for the directors' services, because if there were not the shareholders could not expect them to continue to efficiently conduct the business of the company for a simple vote of thanks?

The CHAIRMAN said the directors had received no remuneration since the formation of the company.——Mr. HILL said that the directors in Mexico, he understood, held a very large interest, and asked whether there was any difference of opinion between them and the directors at home?——The CHAIRMAN said that no difference whatever existed, and they had every confidence in Mr. Chynoweth.

The SECRETARY said that by the last mail important information was received from Mr. Chynoweth, who in many ways was rendering very essential service to the company.

The motion adopting the report and accounts was put and carried unanimously.

A resolution was then passed voting the sum of 250 guineas to the directors. It was also agreed that the general meetings should in future be held half-yearly. The retiring directors and auditors were re-elected. A vote of thanks to the Chairman and directors was passed.

The CHAIRMAN acknowledged the vote, and stated that they had endeavoured since the formation of the company—some four or five years since—to do all in their power to promote the best interests of the shareholders, and he hoped and believed their efforts would eventually be crowned by a permanent success. (Hear, hear.)

The proceedings then terminated.

AUSTIN CONSOLIDATED SILVER MINING COMPANY.

A special general meeting of shareholders was held at the offices of the company, Fenchurch-street, on Monday, for the purpose of confirming or otherwise the resolution passed at the last meeting—that the purchase of the mines proposed to be sold to the company be not further proceeded with, and that the company be wound-up voluntarily.

Previous to the commencement of the proceedings, and before the directors had entered the room, several shareholders asked Mr. R. M. Millington his object in issuing the circular (which was referred to in last week's Journal).

Mr. MILLINGTON explained, that although he was not present at the previous meeting, he had heard from a friend the character of the proceedings, and having been informed that the directors were not shareholders, and that Mr. Alison was not allowed to speak, he (Mr. Millington) wrote to that gentleman for information, which had resulted in the issuing of the circular. He had seen several shareholders, who had appointed him their proxy to vote against the winding-up.

After some further conversation, the proceedings of the meeting commenced.

Mr. LUCAS (one of the directors) occupied the chair.

The CHAIRMAN proposed that the resolution passed at the last meeting be confirmed.

Mr. PARRY referred at considerable length to the various circumstances connected with the company since its formation, and expressed an opinion that whatever steps the present meeting might think fit to adopt, the contract entered into with the vendors for the purchase of the mines would have to be carried out. He also stated that as the directors were not shareholders, they ought not to occupy their present position.

The SOLICITOR, in reply to various other statements made by Mr. Parry, said the acceptance for 1500*l.*, in the hands of the London and County Bank, would have become a liability had the purchase of the property been completed; and, as far as the contracts were concerned (extracts from which he read), they were contingent upon a favourable report from the agent selected to inspect the mines. As the report was unquestionably most unfavourable, the conditions of the contract could not be complied with, and hence the company could not be liable to any penalty whatever.

The CHAIRMAN said that although the directors did not appear upon the register as shareholders, they had no wish whatever to be exempted from their proportion of the expenses that had occurred.——After some further discussion, the question was put and negatived by 17 to 13 votes. The question was then considered of the expediency of winding-up the company voluntarily, a resolution to that effect being proposed from the chair, and seconded by Mr. EDMUND.

Mr. PARRY moved, as an amendment, that a committee of enquiry be formed to investigate the past transactions of the company, with power to take counsel's opinion, and to submit a report to a special meeting of shareholders.

At this stage of the proceedings, Mr. ALISON (one of the vendors) rose, and attempted to address the meeting; when the solicitor protested against Mr. Alison speaking, upon the ground that he had not paid his calls. Upon the question being put to the meeting, 17 hands were held up in favour, and 14 against Mr. Alison being allowed to speak.

Mr. ALISON said that if the shareholders agreed to wind-up they would be doing the worst possible thing for themselves, for they would lose not only the 1*l.* per share already paid, but they would have to complete the purchase of the property. (Cries of "No, no.") That was his own opinion, which was supported by the opinion of counsel,

He strongly advised the meeting to appoint a committee. With regard to Captain Barnett's report, he (Mr. Alison) contended that it contradicted itself, when he said that "all the mines in the district were equally bad;" for he (Mr. Alison) held in his hand a report of the assessor of the mines of Austin, which showed that the average yield of silver in no less than 44 mines was 83 ozs. per ton—in itself a perfect proof that the mines in that district were paying remarkably well. His advice was that the shareholders should not take a leap in the dark, and decide upon winding-up. The shareholders would have to pay for those mines whether the company was wound-up or not; and, therefore, they might just as well go along pleasantly. (Laughter.) The only difference was that if they agreed to wind-up they would compel him to go into Chancery, and some fine day they would get a letter from the liquidator demanding the remaining 4*l.* per share. He contended that the contract referred to by the solicitor admitted of no contingency whatever.

The SOLICITOR said he had taken the opinion of Mr. Karslake (of the Chancery bar) upon that question, which was to the effect that the contract with Mr. Alison ought not, and could not, be enforced.

Some discussion ensued, which resulted in the rejection of the amendment, when the resolution was put and carried.

Four of the largest shareholders were appointed the liquidators.

A vote of thanks to the Chairman and directors terminated the proceedings.

WHEAL GRYLLS MINING COMPANY.

A general meeting of shareholders was held at the company's offices, Austinfriars, on Tuesday,—Mr. PETER WATSON in the chair.

Mr. J. H. MURCHISON (the secretary) read the notice convening the meeting, and the minutes of the last were approved. A statement of accounts was submitted, which showed a debit balance of 354*l.* 7s. 4d.

The report of the agents was read, as follows:—

April 21.—Fisher's Lode: During the last three months the 40 fathom level has been driven 17 fms., and is now 54 fms. east of the flat-rod shaft. The lode passed through for this distance can be taken away at about 10s. in 1*l.* The end at present is driving by six men, at 3*l.* 10s. per fathom, the lode being worth 5*l.* per fathom. In the back of this level we have risen and communicated to a winze sunk from the level above, which has opened ground that is now working by tributers at 10s. in 1*l.* The 30 has only been driven about 10 fms. east of Pressure, and is suspended by reason of its getting nearly through the elvan course, where we anticipated cutting more water, and our pumping engine is not of sufficient power to contend with an increased quantity. Grylls whim-shaft has been sunk 5 fms., and is this depth below the 30, the ground being drained by the drivage of the 40. We have also driven the 35 east of this shaft 3 fms.; the present price of driving, by six men, is 3*l.* 10s. per fathom. This level is passing through good profitable ground. About 15 fms. east of this shaft there is a winze sunk 4 fms. through a lode worth 8*l.* per fathom, and is sinking by six men, at 2*l.* 15s. per fathom. The 20 has been driven 9 fms., and is now 68 fms. east of Pressure shaft. The lode in the end is small and poor, and in consequence of its being so near the boundary is suspended, as 8 ft. further east would bring us into the adjoining mine (East Wheal Grylls). In the tribute department there are employed at the present time four men at 6s. 8d. in 1*l.*, five men at 8s., six men at 10s., and fourteen men at 14s. in 1*l.*, at a standard of 45*l.* per ton, the tributers paying all expenses. During the last three months there have been driven and sunk in the different levels 44 fms. of ground, and stoped by tutwork and tribute 171 fms., making in the aggregate 215 fms. This has produced 30 tons 6 cwts. 3 qrs. 8 lbs. of black tin, which sold for 1391*l.* 4s. 9d. There are employed in and on the mine 161 persons, including those dressing tin. With respect to the future prospects, we consider that by working the back of the 40 and the bottom of the 30, with a full quantity of men, we can make the returns meet the costs. Our reserves above the 30 are nearly all exhausted, and we cannot sink the mine any deeper without a larger engine; therefore the greatest part of the tin must come from the present bottom level. We must say that the prospects of the mine are fully as good as at any previous period.—EDWARD ROGERS, EDMUND ROGERS.

The CHAIRMAN, in moving that the report be received and entered on the minutes, and that the accounts be passed and allowed, stated that the present almost unparalled depression in the price of tin had, in common with all other tin mines of Cornwall, adversely affected the financial position of Wheal Grylls. Some few years since the tin returned realised between 75*l.* and 80*l.* per ton, while—and he regretted to state it—the average price realised during the past quarter did not exceed 46*l.* per ton—a difference of something like 30*l.* per ton, or, upon the 30 tons sold, an average of not less than 900*l.* or 1000*l.* And not only had it made that serious difference upon the quantity of tin sold, but with such a low price they had been unable to set many pitches which in ordinary times would have left a good profit to the adventurers. As far as he was concerned, he did not look for a much better price for tin until the Americans settled down to trade. But what they, as adventurers in this mine, had now to consider was, what course it would be best for them to adopt as to the future. Capt. Rogers, in his report, had called attention to the fact that to prosecute the mine to a greater depth a larger engine must be erected; but, as the present was certainly not the time to make calls upon the shareholders to supply new machinery, he wished to elicit their opinion as to what course should be adopted. He might mention that Captain Rogers was of opinion that by stopping most of the tutwork operations, and continuing the tribute, even with the present price of tin he could meet the costs during the current quarter. He regretted that the largest shareholder was not present, but he had been in communication with him upon the position and prospects of the company, and he had placed in his hands a proxy, authorising him to use it as he (the Chairman) might deem best for the interests of the shareholders. The gentleman referred to was quite willing to pay his proportion towards a vigorous prosecution of the mines, if that course were deemed advisable—in fact, to do that which shareholders thought most advisable. With the view of eliciting the opinion of the meeting he would, without further remark, move that the report be received and entered on the minutes, and that the accounts be passed and allowed.

Mr. E. COOKE seconded the proposition. For his part, he most certainly did not think it advisable that the expense of a new engine should be incurred, at least for the present; and he would suggest that, under the present circumstances, the expenses should be reduced to the lowest minimum, and, although it was contrary to his general advocacy, that most of the tutwork operations should be suspended. In three or six months hence the general aspect of affairs might be altogether changed, when the development of their mine might be resumed with that vigour and spirit which, under ordinary circumstances, he always advocated. There could be no question that with a better price for tin there was everything to encourage the shareholders to sink the mine at least 20 or 30 fms. deeper, but, as they had been already informed, that could not be done without a larger engine. At present, however, he felt convinced that the shareholders would not like to be called upon to pay for it; therefore, let them go on with the mine for the next three or six months, meeting as nearly as possible the costs by the returns, and at the end of that period consider the best course to be adopted as to the future.

Mr. KING stated that his opinion accorded with that expressed by Mr. Cooke, and he felt assured if the course suggested were adopted it would prove satisfactory to all concerned.——Mr. BURLS said that, if other people were inclined to take the mine up, his advice would be to let them have it upon terms equitable to both parties.——Mr. E. COOKE dissented from the adoption of any such course, upon the ground that if the price of tin improved there would be every encouragement for the shareholders to develope the mine with vigour.

Mr. W. WATSON (the purser) mentioned that there was a run of ground for upwards of 80 fathoms in length near the principal engine-shaft, and extending to the extreme eastern boundary, the lode varying in value from 10*l.* to 20*l.* per fathom. The mine had been crippled for some time past, simply from the want of more efficient pumping-power, and thereby the cost had been considerably increased. If it were determined to erect a larger pumping-engine, they would be able to dispose of their present engine, and the amount realised would go towards the purchase of the new engine.

The CHAIRMAN, in reply to a question, stated that the mine since it had been the property of the present company had returned something like 50,000*l.* worth of tin.

The motion for adopting the report and passing the accounts was put and carried. A call of 10s. per share was made. The last call was in October.

The CHAIRMAN, upon the question of the re-election of the committee, said that for the last eight years he had been a member of the committee, during which time he had given considerable attention to the affairs of the mine. (Hear, hear.) And it was with great reluctance that, owing to continued ill-health, and under the advice of his medical adviser, he was compelled to retire, at any rate for a period, from any active employment. At the same time, however, should he be in Cornwall at any time it would afford him considerable pleasure to visit this and the other Grylls Mines, and to render every assistance in his power. (Hear, hear.)

The other members of the committee having been re-elected, a vote of thanks was passed to Mr. Watson for the valuable service he has rendered the company during his connection with it. A vote of thanks to the Chairman terminated the proceedings.

EAST WHEAL GRYLLS MINING COMPANY.

A general meeting of shareholders was held at the offices of Mr. Peter Watson, on Tuesday.—Mr. PETER WATSON in the chair.

Mr. W. WATSON (the purser) read the notice convening the meeting, and the minutes of the last were approved.

The accounts submitted showed a credit balance of 220*l.* 3s. 1d.

The report of the agents was read, as follows:—

April 21.—During the last three months we have sunk Firmatone's engine-shaft 7 fms. 2 ft. 6 in., which is now down to the 27, shaft cased and divided, and a level just commenced to drive east at this depth, by six men, at 1*l.* 15s. per fm.; the lode is 3 ft. wide, worth 3*l.* per fm.; by extending this level about 8 fms. east we expect an improvement, as there is a good lode gone down in bottom of the level above, that will work on tribute at 6s. 8s. in 1*l.* At the 17, east of this shaft, we have four men employed on tribute at 14s. in 1*l.*; the lode is worth 3*l.* per fm. At the 10, east of said shaft, we have also two men employed on tribute at 14s. in 1*l.* Curtis's flat rod shaft has been sunk 3 fms. 1 ft., and is now 4 fathoms below the 7; the lode sunk through in this shaft is worth 6*l.* per fm., which is about its value at the present time; the price for sinking by six men is 8*l.* per fm. The 7 has been extended east 5 fms., and is now 23 fms. from Curtis's shaft; the value of the lode for this distance is 7*l.* per fm.; in the back of this level there are four men on tribute at 7s. 6d. in 1*l.*; the lode is worth 8*l.* per fathom, and two men at 14s. in 1*l.*, lode worth 3*l.* 10s. per fm.; also two men in the bottom at 7s. 6d. in 1*l.*, lode worth 9*l.* per fathom. The 7 has been driven west of Curtis's shaft 8 fms., and is now 24 fms. from said shaft; the first 4 fms. driving was through a lode worth 8*l.* per fm., but the last 4 fms. was not so productive, being worth 3*l.* per fm.; in the bottom of this level we have sunk a winze 2 fms. 4 ft. through a lode worth 10*l.* per fm., and have two men employed on tribute at 10s. in 1*l.*, lode worth 6*l.* per fm.; and six men at 6s. 8d. in 1*l.*, lode worth 9*l.* per fm.; in the back of this level there are four men on tribute at 12s. in 1*l.*; the lode is worth 5*l.* per fm. At the 10, from Fisher's lode, we cross-cut north 18 fms., and intersected the middle lode, and have driven on its course 11 fms. east; the lode for this drivage has been in a disordered state, unproductive, and is now suspended.—Fisher's Lode: In the bottom of the 10, west of Thomas's shaft, we have two men employed on tribute at 7s. 6d. in 1*l.*, and two men at 12s. in 1*l.*, at a standard of 45*l.* per ton, the tributers paying all expenses. During the last three months we have driven and sunk in the different levels and shaft 38 fms., and stoped on tutwork and tribute 109 fms., making in the aggregate 145 fms.; this has produced 19 tons 0 cwt. 0 qr. 19 lbs. of black tin, which realised 904*l.* 6s. 3d. The average value of the lode taken away throughout the mine in the last quarter is 6*l.* 4s. 8d. per fm. There are employed in and on the mine 126 persons, including those dressing tin. With regard to future prospects, we would say that if the different points of operation prove so productive as indications lead us to believe, we shall be able to make the returns meet the cost, notwithstanding the present low price of tin.—EDWARD ROGERS, EDMUND ROGERS.

The CHAIRMAN said that the report so fully detailed the position and prospects of the mine, that but little was left him to add. It would be recollected that the last call (of 2s. 6d. per share) was made in October, and that no call was made at the last meeting. The shareholders had now to determine whether they would make a call or not at the present meeting. In the accounts before the meeting there were extra charges for flat-rods, &c., amounting to about 150*l.*, which would not recur during the present quarter. There could not be a divided opinion as to the favourable character of the report, and there could be no doubt that in East Wheal Grylls they possessed a valuable property; but, as he had already mentioned at the Wheal Grylls meeting, the price of tin was seriously militating against their success, and but for which East Wheal Grylls would long since have entered the Dividend List. He concluded by moving that the report be received and entered on the minutes, and that the accounts be passed and allowed.

Mr. W. WATSON said that the accounts were brought up to the end of February, and he did not recommend a call being made upon the present occasion.

Mr. JEFFERYS seconded the proposition.

Mr. E. COOKE said he thought the shareholders would agree with him that the mine was opening up fully equal to their most sanguine expectations; and, although the depressed price of tin very seriously reduced the amount realised for their returns, yet as the mine was shallow their costs were comparatively light. As far as the property itself was concerned, whether as regards its position or prospects, there was everything to satisfy the shareholders, and all they had to hope for was a better price for tin. It was a fact worthy of notice that there were two shafts, 150 fms. apart, sinking upon the same lode, with good tin ground at either end.

The CHAIRMAN said that Firmatone's shaft had been sunk in a rich bunch of tin from surface to 7 fms. below the adit, which was 40 fathoms from surface. They were now driving east and west to get under that ore ground.——Capt. ROGERS, in reply to a question, stated that no call was required upon the present occasion.——Mr. JEFFERYS said that he would take the present opportunity of stating that their purser deserved, at least, the best acknowledgments of the shareholders for the clear and satisfactory form in which he presented the accounts, and for the efficient manner in which he discharged the duties of his office. (Hear, hear.)—The motion was put and carried unanimously.

A vote of thanks to the Chairman terminated the proceedings.

GREAT WHEAL GRYLLS MINING COMPANY.

A general meeting of shareholders was held at the offices, Austinfriars, on Tuesday, Mr. PETER WATSON in the chair.

The accounts showed a credit balance of 54*l.* The report of the agents was read, as follows:—

April 21.—Michell's Lode: During the last three months Michell's flat-rod shaft has been sunk 3 fms. 4 ft., and is now down 6 fms. below the 12; our progress in sinking has been impeded by reason of the shaftmen breaking the windbore; the lode in the shaft is 2 ft. wide, unproductive; this shaft is being sunk by six men, at 12*l.* per fm.—Steven's Lode: The 12 has been extended east 13 fms., and is now 36 fms. from the cross-cut (driven from Michell's lode); a part of this ground is now working by tributers, at 11s. in 1*l.*; the lode in the end is worth 3*l.* per fm. At this point we have intersected Kendall's lode, and commenced to drive west on its course by four men, at 3*l.* per fm.; the lode is producing saving work for tin, but there has not been enough done to ascertain its value. This level has been driven west, on Steven's lode, 2 fms.; the lode for this drivage was 2 ft. wide, unproductive, and is, therefore, suspended. At the adit level there has been a winze sunk, and communicated to the level below, which has ventilated that part. Our tribute setting for the present month is two men at 10s., two men at 11s., and two men at 14s. in 1*l.*, the tributers paying all expenses. We have raised and sold in the last three months 435 bushels of tinstone, which realised 106*l.* 8s. 5d. With respect to future prospects, it is impossible to calculate how much the returns will be during the next quarter, but we expect the cost will be about 120*l.* per month. In conclusion, we would remark that Michell's flat-rod shaft has to be sunk 4 fathoms deeper to get to the 22, and then a cross-cut has to be driven south 15 fathoms to cut Steven's lode; we expect this would occupy six men about seven months to accomplish; this is an important point.—EDWARD ROGERS, EDMUND ROGERS.

The report was received and ordered to be entered on the minutes, and the accounts were passed and allowed. A call of 2s. per share was made.

A vote of thanks to the Chairman terminated the proceedings.

EAST WHEAL RUSSELL MINING COMPANY.

A quarterly general meeting of the shareholders was held at the offices of the company, Austinfriars, on Wednesday,

Mr. J. PROCTER in the chair.

Mr. J. H. MURCHISON (the secretary) read the notice convening the meeting, and the minutes of the last were confirmed. The statement of cash account showed a credit balance of 157*l.* 8s. 2d.; the profit and loss account showed a loss on the three months' working of 617*l.* 5s. 1d. The agents' report was read, as follows:—

April 24.—Homersham's shaft, which is in regular course of sinking, is down below the 140 fm. level 5 fms., in ground moderately easy.—Homersham's Shaft: The 140 has been driven east, on the south part of the lode, 11 fms. 1 ft., the lode proving 3¼ ft. wide, and yielding in places saving work. This drivage having reached a point opposite the ore-bearing part of the north portion of the lode, a cross-cut has been commenced for its intersection, and, judging from the course of ore gone down in the bottom of the 130 above, we are strongly of opinion that when reached it will prove highly productive. Nicholls's winze, sinking below the 130, on the south part of the lode, is down 3 fms., in which the lode is 3 feet wide, composed of quartz, mundic, and flookan, and yielding occasionally stones of copper ore of good quality. The 130 fm. level has been extended east 10 fms. 4 ft. 8 in., and for 5 fms. of this length the lode proved to be from 4 to 5 ft. wide, worth, on an average, 18*l.* per fm.; in the present end it is 4 ft. wide, and kindly, and the driving, which has been suspended for some little time, will be resumed as soon as Nicholls's winze is communicated with the 140 below. The lode in the stopes in the back of the 130 east, and west of Barkell's rise, is worth 15*l.* per fm. In the stope in the back of the 130, west of Barkell's winze, the lode is worth 18*l.* per fm. The 77 east, west of Northey's cross-cut, has been driven 4 fms. 0 ft. 4 in., and for 3 fms. of this length it opened up fair tribute ground. The 130 having proved productive for another 5 fms. beyond that reported at the date of the last meeting, we are the more firmly of opinion that a good course of ore will be found in the 140, and no time will be lost in pushing on the cross-cut for its intersection. We sample, on Friday next, about 130 tons of ore.—JAMES RICHARDS, JOHN GOLDSWORTHY.

Captain GOLDSWORTHY, in reply to a shareholder, explained that the cost since Dec. was smaller in amount, in consequence of its having been agreed at the last meeting to suspend (or rather defer) the tutwork operations in three or four different places.——Mr. W. MICHELL thought that that suggestion had not been acted upon, no notice having been taken of the suspension in the reports.

Capt. GOLDSWORTHY explained that there were two different stopes—one west of the winze and one west of the rise; these were two different places, one being risen from the 130, and one sunk from the 120.——Mr. MILFORD thought that there was one favourable feature in the accounts—the loss on the three months' working being less.

Mr. MURCHISON said that if the standard had been as good as it was a year or two ago, the loss would only have been about 190*l.*——Capt. GOLDSWORTHY said that the sampling after next would be a good one, in fact, the best for some time past. The strike amongst the miners had interfered considerably with their operations. The mine was now looking better. They were now driving the cross-cut in the 140, the lode not dipping fast to the east.——Mr. MICHELL thought that some alteration ought to be made in the rule restricting the inspection to one day per week. He (Mr. Michell) was often in Cornwall, and being a large shareholder, would often like to inspect the mine for himself, but unless he went on a Wednesday he was unable to examine the underground operations.——Mr. MURCHISON explained that the rule referred to was passed when there were considerable market operations in the shares, the excitement being so great that, from the number of inspections, the operations at the mine were very considerably impeded. At the present time, however, there was no difficulty in obtaining an order for inspection, independent of the regular day, Wednesday.

Capt. GOLDSWORTHY said that he should be happy to go underground with an inspecting agent any day, except Sundays.——Mr. MICHELL thought it unfair to expect an agent to go underground twice a day.

After some discussion, Mr. MURCHISON explained that a special order was never given, but simply a certificate stating that the party applying to inspect was a shareholder.

The report and accounts were received and adopted.

Upon the proposition of Mr. MICHELL, it was resolved that the resolution restricting the inspecting day to Wednesday be considered at next meeting.——Mr. MILFORD asked the names of the present committee?——The CHAIRMAN said they were Messrs. Jardine, Procter, and Shaw.——Mr. MICHELL thought that they ought to be elected quarterly, as in most other cost-book mines.

The CHAIRMAN said that they (the committee) held office in pursuance of the rules of the company, by which any of the committee could be altered, or new ones elected, when notice was given. These rules were the same as those adopted in Mr. W. A. Thomas's mines; and he (the Chairman) thought that notice should always be given when it was intended to propose a change in the committee, and the name or names of any new candidates given, in order that the shareholders generally should be made aware that such special business was to be proposed.

After some discussion, it was resolved that notice be given for next meeting to alter and amend Rule No. 2, with reference to the mode of electing the committee.

The CHAIRMAN said that, with regard to the accounts, it appeared that a call of 3s. per share would enable them to carry on the mine to the next meeting.

A call of 3s. per share was then made. The committee were empowered, on the motion of the Chairman, to deal with the forfeited shares for the benefit of the company.

A vote of thanks to the Chairman terminated the proceedings.

GREAT NORTHERN MINING COMPANY OF IRELAND.

At a meeting of shareholders, held on Tuesday, at the company's offices in Glasgow, the following report was read and unanimously adopted. The company's affairs were considered by the shareholders present to have assumed, after much patient waiting, a healthy and cheering aspect.

The directors have the pleasure of informing the shareholders that their mines are in a highly satisfactory state. Since last meeting, eight months ago, considerable progress has been made in developing sources of ore, in stoping, and in removing ore to the surface, as well as in preparing it for market. But still greater progress could have been made had it not been for the unsettled political condition of the country, which caused the directors to resolve to limit the operations of the company to the extent of a total suspension in some cases, as in the case of the Tassan Mine, where operations were suspended for over two months. Happily this state of things is now changed. It will be recollected that at the last meeting the directors reported the company having acquired a considerable addition to their mineral ground, on which, among other lodes, was situated the New Holland Mine. This mine was immediately prosecuted, and sunk to a depth of fully 16 fms., during which operation a discovery was made within three-quarters of a mile, at a place named Darkley. Such was the extraordinary character and importance of the discovery that it attracted great attention, and the directors became naturally more anxious to acquire the property. This they accomplished through one of their number, to whom the property chiefly belonged, and who disinterestedly secured the assignment of it to the company for a nominal consideration. The lease was for 21 years, at a royalty of 1-20th, and the rights extend over several thousand acres of an unexplored mineral district. Several of the directors, accompanied by some of the shareholders, when visiting the other mines of the company a few weeks ago, minutely examined this mine, Two shafts are being sunk upon the lode, one of which is down 10 fms. deep, and the other 8 fms. In all the "ends" and "bottoms" of these shafts the ore is to be seen standing, and between them, on the back of the lode, there is an open cutting for several fathoms in extent, in which, from the surface the ore can easily be perceived to be fully 18 in. thick. The ore is very pure and easily worked, a considerable quantity having been already brought to surface; and altogether the discovery is considered very remarkable, if not unprecedented. Machinery of an inexpensive character is nearly completed for this mine, and will be erected within the course of the next few weeks, when the ore will be rapidly produced, and quickly prepared for the market. Arrangements have been made for resuming operations at the New Holland Mine, which were suspended on account of the state of the country, and on account of the discovery at Darkley. Ore was found in all the ground through which the shaft was sunk, and the Darkley discovery tends to confirm the highly favourable opinion originally formed of this mine. The lode in the Annalough Mine has been cut at 30 fms., and ore found in it; 5 fms. more have been sunk on the course of the lode; and when the mine is down another 5 fms.—*i.e.*, 40 fms. in all—it is believed that it will be in the rich course of ore formerly so profitably worked in this mine, after which the mine will become immediately productive. The Tassan Mine is one of the mines which the directors thought it prudent to suspend for a time. It is now being worked again, but under different management. The large quantities of ore laid open have begun to be stoped, and the directors count on a regular supply from this mine. As the balance-sheet shows, the ore sold, together with that in store, and on the dressing-floors, amounts to 4196*l.* 0s. 2d. and such of the ore as has not been sold will be dressed, and realised without delay; and the directors feel much pleasure in having it in their power to recommend a dividend of 10 per cent. on the called-up capital of the company, payable on July 31. This dividend amounts to 3000*l.*, leaving a balance of 1196*l.* 0s. 2d. The directors expect to be able to recommend a much increased dividend at future meetings. In order to be able to carry on operations at the mines, and to take advantage to the fullest extent of the discoveries already made, as well as to pay what is owing by the company, the directors have resolved to issue the remaining shares of the company's stock, which, in the first place, will be issued *pro rata* and at par to the shareholders. The directors congratulate the shareholders on the steadily improving prospects of the mines, and they feel justified in expressing their strongest confidence in the results to be obtained. At this meeting Messrs. Dunlop and Ferguson retire from the direction, but are eligible for re-election. The auditor also retires, but may be re-elected. The remuneration of the directors and the auditor is to be fixed by the shareholders, in terms of the Articles of Association.

THE RUSSIAN (VYKSOUNSKY) IRONWORKS COMPANY.

The first general meeting of shareholders was held at the London Tavern, on Thursday, Mr. JOHN MOLLETT in the chair.

The SECRETARY read the notice convening the meeting.

The report of the directors stated that, in pursuance of the project for a re-constitution of the company, the Hon. Capt. Hobart, one of the directors, immediately proceeded to St. Petersburgh, and made such arrangements that the directors were prepared to recommend to the shareholders, in December last, a large and effective combination. Before this could be carried, the unsettled state of the Money Market, and other causes over which the directors had no control, intervened, and the proposed plans were frustrated, although from week to week the directors were led to expect a satisfactory arrangement would be made. A fresh combination was subsequently brought under their consideration, and although this particular measure has not yet been carried out, the directors have such other arrangements in progress as will, they trust, effect the object in view. The directors have undiminished confidence in the value of the property acquired by the company, which, with adequate supervision, only requires a moderate addition of working capital (about 50,000*l.* beyond the original payment of 5*l.* per share) to render the works highly remunerative. This view has recently been most effectively confirmed to the directors by the engineer of a large company, who has just returned from Russia. This gentleman states that 500 tons per week (or a larger quantity) of Vuicksa pig-iron could be sold at St. Petersburgh at 6*l.* per ton. This is produced at the works for about 2*l.* per ton, and would leave a profit of more than 2*l.* per ton, or at the rate of 1000*l.* per week, on this production alone. But to effect this more blast-furnaces are necessary, and for these and other works the additional capital now proposed to be called up is required, as well as to meet existing liabilities. An auditor will be sent out to the works, to examine the accounts there for the period of eight months that will have elapsed since the company took possession, on August 27 last.

The CHAIRMAN moved that the report be received and adopted, and after referring to the arrangements that had been pending with a view to an amalgamation with other companies, stated that the directors' confidence in the great value and capabilities of the works was not only not diminished, but, on the contrary, had been considerably strengthened by independent and disinterested testimony. Among others, that of the engineer of a very large company, with which it was not impossible this (the Russian Ironworks) might amalgamate. That gentleman had been to Russia, and had returned with a better opinion of the property than the directors themselves entertained. (Hear, hear.) To carry out these works with that efficiency and upon that scale which they unquestionably merited, it was indispensible that they should be placed in an effective working condition, which, as stated in the report, would require an outlay of capital. It was one of the conditions made with the Russian Government—before they sanctioned the sale of the property to this company—that capital should be found for the effective working of the property; and the Russian Government, he might mention, was the best friend of the company, and its best customers, although recently a large firm in St. Petersburg had offered a contract to take a large quantity of the iron at a very remunerative price to the company. (Hear, hear.) The works were progressing steadily and quietly, and such results had been produced since they became the proprietary of the property as to fully bear out all the statements the directors had put forward.

Col. ELSEY (a director) seconded the proposition, and in doing so stated that it would be satisfactory to know that a letter had been received that morning from Mr. Hughes, the engineer of the Millwall Ironworks, who went to Russia to examine the property, and report upon it to his company, to the effect that the mines were very valuable, provided means were supplied for working them effectually; and recommended that two new blast-furnaces should be erected, at a cost of between 6000*l.* and 7000*l.*, which he calculated would each make 100 tons of iron per week, and yield a nett profit of 25,000*l.* per year. (Hear, hear.)

Mr. HUGHES, who was present, upon being appealed to, corroborated the statements he had made in the letter referred to.

Mr. EVANS (Messrs. Newbon, Evans, and Co., solicitors), replying to a question, stated that the first arrangement for an amalgamation was in abeyance, but another was in progress, and they had hoped it would have been concluded before the present meeting, but his partner had been suddenly called away to Paris, and the party with whom they were negociating was abroad. A power of attorney had been, however, sent out to him, which it was expected would have been returned that morning.

The Hon. Capt. HOBART stated that although there was yet a great deal to do in the way of establishing a more perfect and efficient system of working, and although the works did not come into the possession of the company till November, the accounts for the three months showed a profit of 50,000 roubles. (Hear, hear.)

After a long discussion, during which a suggestion was made that a committee of inquiry should be appointed to investigate the affairs of the company, which was immediately assented to by the directors, it was eventually agreed (upon the proposition of Col. ELSEY, seconded by the Hon. Capt. HOBART) that the consideration of the report of the directors and balance-sheet be postponed, and that a committee of inquiry be appointed to examine the position of the company, and that this meeting be adjourned till May 10.——Sir Thomas Parkins, Messrs. A. Goldsmid, H. Pauli, J. Ross, and J. Routh were appointed members of the committee.

A vote of thanks to the Chairman and directors terminated the proceedings.

ROSSA GRANDE GOLD MINING COMPANY.

The first general meeting of shareholders will be held on May 7.

The report of the directors, to be submitted, states that, relieved from those hindrances which have hitherto prevented them from working the mines, they hasten to avail themselves of the opportunity they have so long desired to meet the shareholders. The causes of the unexpected delay which for two years have prevented the directors from obtaining possession of this property in Brazil have been fully set forth in the various circulars issued to the shareholders. Letters have been received from Capt. Brokenshar by the April mail, stating that he had received the agreement which guaranteed possession without payment of purchase money until the formalities of a valid transfer (of which there is no further doubt) can be concluded. The directors, relying upon the reports of Capt. Thos. Treloar and Capt. Brokenshar, believe that, with adequate outlay, and sufficient time to put the mines in a fair course of working, profitable returns will be made. The lodes in the company's property are situated in the great gold-bearing district of Minas Geraes. The Gongo Soco Mines, formerly so rich, lying in a line east, and the Morro Velho St. John del Rey, now so productive, in a line west of the Rossa Grande Mines. Capt. Brokenshar in his report states that wherever he had tried the ground on the company's property he finds it auriferous. The directors feel that these conditions, and the statements which Capt. T. Treloar and Capt. Brokenshar have so favourably reported, warrant the most strenuous exertions for the purpose of developing the mines with the utmost vigour.

TRUTH'S ECHOES, OR SAYINGS AND DOINGS IN MINING.

The Mining Share Market continues very inactive, especially in British mines, but in some of the foreign mines there has been a considerable amount of business transacted. CHONTALES, FRONTINO AND BOLIVIA, and ST. JOHN DEL REY shares have been freely dealt in. The usual fortnightly settlement took place yesterday (Friday), which passed off satisfactorily. The general tendency of the market is of a declining character, especially in tin mines, and very little improvement is anticipated before an advance in the metal market takes place, when the other extreme is as likely to follow.

WHEAL SETONS have been in request at lower rates, whilst WEST SETONS have been rather quiet, and but few transactions reported.—CLIFFORDS continue dull, and only dealt in at minimum prices.—WHEAL BASSETS have been sought for at buyers' figures.—EAST BASSETS have slightly improved, but very little done.—TINCROFTS have been more in demand, and prices have improved.—WEST CHIVERTON continue a favourite mine, and freely dealt in at fair market figures. A slight depression has subsequently taken place, arising from a pressure of some shares on the market for cash.—CHIVERTON MOORS command attention, but prices have varied.—CHIVERTONS are dull at present prices, and show a weaker tendency.—GREAT LAXEYS have been in good demand, and changed hands at improved rates.—GREAT NORTH LAXEYS have receded, and freely offered at lower prices.—SOUTH DARRENS are apparently firm, but rather quiet.—FRANK MILLS shares have been enquired for at minimum quotations, but are slightly firmer.—EAST WHEAL GRENVILLE and WHEAL GRENVILLE have shared in the transactions of the week without any improvement in price.

NORTH TRESKERBYS have been done at lower rates.—NORTH ROSKEARS have receded, and more freely offered.—GREAT BUSY and HALLENBEAGLE are quiet, at nominal figures.—WHEAL ROSE are more than ordinarily dull.—GREAT VORS have change hands at higher rates, but have since shown less activity.—EAST LOVELLS find buyers at minimum quotations.—ROSEWARNE CONSOLS have receded, and are offered at lower rates, and show a tendency to further decline.—ROSEWARNE UNITEDS are less active, and but little dealt in, although the mine is reported to have improved.—EAST ROSEWARNES are enquired for, at buyers' prices.—EAST CARADONS have been done at improved rates, but have since receded.—MARKE VALLEYS are apparently firm at present quotations.—WEST CARADONS have been in better demand, and slightly improved.—TRELAWNYS are more than ordinarily quiet.—HINGSTON DOWN and DRAKE WALLS have been offered at lower rates.—PRINCE OF WALES shares have been dealt in at minimum quotations.—EAST RUSSELLS are sought for at nominal figures.—LADY BERTHA and CREBOR dormant.

OLD GUNNISLAKE.—An important discovery of tin has recently been made in the western ground of this mine, where the chief operations are being directed. There appears to be a long run of good tin ground laid open, embracing Michael's, Cocking's, and Susan's shafts, and from a parcel prepared for market is found rich in produce and quality. There is every reason to believe that the lode has been but little worked for that mineral, and stands whole to a very considerable depth; consequently, it can be stoped away at a trifling cost, and rendered profitable even at the present reduced standard. The tin bears great similarity to that of Drake Walls, being parallel lodes, which is probably the richest quality of tin in the county. It is to be hoped that the resuscitation of this mine will amply remunerate the adventurers.

EAST CARADON.—The lode in the 30 east, on caunter, has improved since last noticed, being worth 18*l.* per fathom; and the 80 east is worth 8*l.* per fathom. The other levels are poor at present. The 70 east and west, on the south lode, is valued at 18*l.* per fathom altogether. The new lode at the 70 west is worth 6*l.* per fathom; and the 70

west, on Fawcett's, is valued at 5*l.* per fathom.—EAST JANE is reported to have improved in the bottom level, but particulars have not yet been received; improvements are fully expected here.

PRINCE OF WALES.—The engine-shaft is in course of sinking in favourable ground, and the 45 east continues to look very promising for further improvement here.

CHIVERTON MOOR.—The shaft is nearly completed to the 50, and, as the lode is only a few feet from the shaft, will be shortly seen, and, no doubt, be found as anticipated. The lode in the 40 east has improved within the last few days, and, from present indications, there is every probability of a great improvement near.

ROSEWALL HILL AND RANSOM UNITED.—It is reported that a very important discovery has taken place in the 100. The lode appears to be opening out much larger, but requires further development to prove its ultimate value. Great results are anticipated from this discovery, inasmuch as in the levels above the lode opened out from 8 ft. to 10 ft. wide, and were worth from 200*l.* to 300*l.* per fathom for tin. Should this prove of equal value the mine will be put into a very excellent position, notwithstanding the present low price of tin. The returns have been about 11 tons of tin per month, and recently increasing; still greater energy, if possible, must be exercised to keep the mine free from debt. Should any improvement in the standard take place, and the discovery prove as anticipated, it will become a source of great gratification to the shareholders, as well as a matter of gratulation to the locality generally. In fact, it is cheering, in the present dearth of mining news, to be enabled to hold out the slightest encouragement to shareholders generally.

JAMES LANE.

From Mr. EDWARD COOKE:—There is really nothing particular to record with regard to the market for home mines, and in the absence of any general business an onslaught has been made upon the shares of the CHONTALES COMPANY, and the price has been forced, or rather talked, down far beyond what I had ever contemplated. Of course, if the real holders of the shares allow themselves to be frightened into selling it will just suit the purposes of those who have been selling speculatively, with the hope of buying back at less prices. I again reiterate my opinion that, notwithstanding the fluctuations in the price of the shares, the Chontales Company will be established as one of the most successful enterprises ever introduced to the public for many years. When I state that it is with the greatest difficulty the delivery of shares already sold can be made, it is easy to judge what the effect of a few *bona fide* purchases would be. That it would be a profitable operation to the buyers I have not the least doubt, and already buyers are coming in to a large extent. No company that has been formed during my experience of the market has been so successful, or made such large returns of gold within such a short period of its formation, and long before the present year expires I confidently expect that the monthly remittances will amount to thousands of ounces of gold. The allotment of MINERAL RIGHTS has been made, and, from what I can learn, it was a very fair and impartial allotment. It should be remembered by the shareholders that some two months must necessarily elapse before anything important can transpire, or intelligence be received from the director and agent, who left by the last steamer for the richest gold mining field that has come under the notice of Europeans for many years. The result of their mission will, in all probability, be the acquisition of a very valuable property, which has already been brought under the notice of the Mineral Rights Association. It may be interesting to the shareholders in HOLYBUSH COLLIERY AND COKE COMPANY to know that the operations at their works are progressing most favourably. The number of coke ovens has been increased, and an advance in the price of coke has taken place. With a guaranteed dividend of 10 per cent. for two years, there are not many safer or better investments to be met with. As I intend visiting the colliery next week, I shall be happy to afford any information relative to it. ZACATECAS shares are being rapidly applied for. It is very gratifying to the promoters of this company to find that from every source from which information can be obtained relative to the merits of the Sombrete mines there is but one opinion expressed—that they are exceedingly rich, and the fact of two of the directors, who have joined the board, having been largely interested in the silver mines of Mexico, and resided there for many years, tends to inspire great confidence in the management.

From Mr. J. B. REYNOLDS:—I sincerely wish I could report that there was an active demand for good mining stock; but, unfortunately, many shares have during this week fallen rather considerably, and although I could without any difficulty assign good reasons why things at present look unfavourable, the present aspect of the market is to be regretted. I have no doubt, however, but that a more healthy tone will soon be manifest, and that what at present appears unfortunate will result in much good to the mining interests generally. I say to all my friends, sell no good mining shares now, but buy all you can. Fortunately, a good selection is easily made, and at the present moment I know of nothing so good for investment as sound mining property. After all I have from time to time written about SOUTH CALLINGTON, it is with no little gratification I am informed by the agents of the very important improvement they have in sinking the new shaft. He writes on the 26th inst.:—"We have this day broken some splendid stones of lead from the branch we discovered in the shaft on Saturday last, and it is improving as we go deeper." Surely this is ordinary times would quite justify a rise to 5*l.* per share. Notwithstanding the "bad times," enquiries are still made for DALE shares. With them there is no liability, and considering the prospects of the mine, it is not to be wondered at that they should be by many considered as desirable. WEST CARADON shares have an upward tendency, and are highly spoken of. EAST CARADONS maintain the present low quotation. BRYN GWIOG is reported to be looking very well indeed, and a prospect of a dividend held out at the next meeting but one. STRAY PARK shares have been enquired for, and have changed hands. The price is one of the "absurdities" of the present day. Only 5*l.* per share for Stray Parks! It is but just, however, to the holders to say than an order for fifty, without a limit, would probably put them to 10*l.* The report read at the meeting was favourable. Captain Charles Thomas says,—"With a price for tin equal to the average of eleven years to the end of 1863, the mine could now be worked vigorously to about pay cost." The mine is really worth more now than when the shares were at 35*l.* each. WEST SHARP TOR appears to be "looking up." CHIVERTON MOOR should not be neglected.

From Mr. BAKER LELEAN:—There has been no material alteration in the aspect of the stock and share markets since I wrote last week. The tendency to improvement which showed itself on Thursday and Friday was violently arrested, and the current turned in the opposite direction, on Saturday morning, by the hoax played upon the *Times*, and by the *Times* upon the public, as to the first step in hostilities having been taken by Austria and Prussia, by the simultaneous recall of their respective ambassadors from Vienna and Berlin, and which was unaccountably permitted to remain uncontradicted by the promulgator of the false news during the whole of two days. The adverse influence of the announcement was by no means extinguished by the tardy confession of the hoax. Actual war between the German powers was believed to be less imminent, but so many contingencies are possible to arise out of their belligerent attitude, as also out of the warlike preparations in Italy and Venetia, war believed to be rendered almost probable by the rumoured departure of Garibaldi from Caprera—that a fresh opportunity was offered to the speculators to operate upon prices, of which they did not fail to avail themselves. The failure of Barned's bank, too, was further improved by the ever watchful and inventive fraternity, greatly to the damage of some of the joint-stock banks and financial companies, which, it was falsely reported, were involved with the Liverpool bank. The punctuality with which the Liverpool bills were paid on Tuesday, however, cut this ground from under their feet, while the announcement made in the afternoon of the resolution, of the directors of Overend, Gurney, and Co., to call the meeting of shareholders about the middle of May—that being the earliest period at which it can be convened—accompanied by a statement, that the balance-sheet and dividend will be satisfactory, tended somewhat to quiet the markets, although, as yet, there has not been a recovery in prices of either stocks or shares. The banks, as well as private individuals, appear to be, for once, very cautious, awaiting any turn that political and commercial affairs, both at home and abroad, may take. In Mining Shares, no great business has been done, during the week, and the shares in a few mines have receded in price, though without other reason than operations in the market, which necessarily tell, in either direction, upon the comparatively few shares in which the stock of a mining company consists. The principal business done has been in Great Laxey, Rosewarne Consols, Great Wheal Vor, Clifford, South Darren, Central Snailbeach, Chontales, Frontino, West Chiverton, East Laxey, East Snaefell, Great North Laxey, Chiverton Moor, and Frank Mills. GREAT LAXEY continues to attract attention, and many persons are buying shares who never held mining shares before. It is a good beginning for them, and it will ultimately be of advantage to other good mines. The price is 21½ to 22½, firm, and the later reports from the mine can scarcely fail to sustain, or even to give an impetus to the upward tendency of shares. I suggest their immediate purchase to all with whom I am in communication. CENTRAL SNAILBEACH shares have been freely bought at quoted prices, and the splendid character of the mine, and the prospect of an early reaching of the main lode, which comes into it out of the celebrated Snailbeach, cannot fail to operate favourably upon prices, which may any day become treble or more what they now are. WEST CHIVERTON reports the mine more favourably. The lode in the 100, which is cut through, is from 13 to 14 ft. wide, and is worth 7*l.* per fathom. The lode in the 90 west is 17 ft. wide, and holds its value of 100*l.* per fathom, while the four winzes sinking below are worth 400*l.* per fathom. The 80 west looks well; Valpy's lode is 4 ft. wide, and worth 30*l.* per fm.; and Williams's lode is 2 ft. wide, and worth 20*l.* per fathom. Altogether, the condition and prospects of the mine are better now than at any former time. Though by no means so cheap a mine as Great Laxey, it is, nevertheless, one of the tempting investments of the day, especially as it is thought to be certain that the directors will now see the propriety of increasing the dividends, instead of keeping so large a reserve. Now they have cut the lode so rich in the 100, they may fairly increase the returns of the mine—a circumstance which strengthens the demand of the shareholders for a more liberal distribution of profits. CHIVERTON and CHIVERTON MOOR are both looking well. In the former they are nearly down to the 96, where they will at once commence driving on the lode, to get under the ore ground left in the bottom of the 86, by the old workers. Cookney's shaft is in full course of working below the 96, in which, driving west, there is a promising lode, worth from 2 to 3 cwts. of lead per fathom. EAST LAXEY and EAST SNAEFELL shares should not be lost sight of, by those who are disposed to buy a few shares at a very low price in mines that promise largely. They are both opening in the most satisfactory manner. I have only space and time to add to what I have thus written, that the present is a most favourable opportunity for buying into good mines, prices being lower than they are likely to be in a short time.

THE TIN STANDARD.—There is no official change in the tin standard, notwithstanding the rumours that have been flying about during tht past week, but the market continues exceedingly dull, and sellers of metal are obliged to submit to much lower prices. Refined, 82*s.* to 83*s.*; common, 80*s.* to 81*s.* We cannot better illustrate the position of the Cornish mines at the present time than by taking Captain Charles Thomas's report to the adventurers of Cook's Kitchen, held a few day's since. If the average price of tin for eleven years to the end of 1863 could be realised, they would be able to divide 3000*l.* a year profit amongst the adventurers—even then not at all a remunerative profit considering that upwards of 40,000*l.* have been laid out on the mines. But with the present price for tin not only is this 3000*l.* a year lost, but the adventurers are obliged to pay up 4000*l.* or 5000*l.* a year calls, so that this *one* mine suffers to the extent of nearly 8000*l.* a year.—*West Briton.*

CURE OF CONSUMPTIVE COUGH BY DR. LOCOCK'S PULMONIC WAFERS.—Extract of a letter from Messrs. Carey Cocks and Roper, Man of Ross House:—"A lady, a few months ago, told us she should never fear a consumptive cough again as long as she could get a box of Dr. Locock's wafers, although the greater part of her family had died of consumption." They give instant relief to asthma, consumption, coughs, and all disorders of the breath and lungs. To singers they are invaluable for clearing and strengthening the voice, and have a pleasant taste. Price 1*s.* 1½*d.* and 2*s.* 9*d.* per box. Sold by all medicine vendors.

HOLLOWAY'S OINTMENT AND PILLS—FEAR NOT.—Though surrounded by circumstances disadvantageous to health, these remedies, if properly applied, will cut short fevers, influenza, inflammation, diphtheria, and a host of other complaints always lurking about to seize on the weak, forlorn, and unwary. The superiority of Holloway's medicines over others for subduing disease has been so fully and widely proved that it is only necessary to ask the afflicted to give them a trial, and if the instructions folded round them be followed no disappointments will ever ensue, or dangerous consequences result. In horseness and ulcerated sore throat the ointment should frequently be rubbed on the neck and top of the chest—it will arrest the increasing inflammation, allay disquietude, and gradually cure.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

NEW WHEAL TOWAN.—This property will be very soon advancing in value. All the shares are taken privately by gentlemen connected with leading mines, and if plies of copper raised from the adit level are to be taken as any indication of the value of a lode, then most assuredly the Towan lode (which it is well known gave the large profits in the old Towan Mine) will soon speak for itself. The capital in hand is sufficient for all purposes, and as the property is divided into only 2000 shares, it is but reasonable to assume that they may go to a very high premium. Capt. Pryor reports most highly of the property and its prospects.

OLD GUNNISLAKE.—The recent discovery of tin in these mines is realising the most sanguine anticipations that were formed of its value. A ton and a half of tin has been stamped out and assayed, and without burning it is worth 18 cwts. 2 qrs. 13 lbs. of good tin to the ton of stuff. This is above the average of Devon or Cornwall. There is already upwards of 4500 fms. of ground drained, and 1200 fathoms available, and there is little doubt that the tin is standing intact to the bottom of the mine for 90 fms. under the deep adit, and the average cost of stoping will not exceed 20*s.* per ton, as the whole mine has been already laid open by shafts, levels, or winzes. Having thus judiciously tested the value of the discovery, the directors, we understand, are about at once to erect the necessary machinery for dressing, so as fully to develope it. The prospects for copper in the ends and shafts at Parker's are still most promising.

ROARING WATER.—The lode in Grady's engine-shaft is greatly improved, producing splendid stones of crystallised grey copper ore. The lode is large and masterly, and bids fair for a mass of rich mineral.

OKEL TOR.—There is a fine large lode coming in at the 80 and 65 fathom levels eastward in this mine; the latter end will produce 6 tons of good copper ore per fathom.

NEW WHEAL MARTHA.—I am glad to hear that West Martha is added to this mine, and the company is about to put up a suitable pumping-engine. If this is carried out, the mine sunk a little deeper, and cross-cuts put out to intersect the side lodes, another Devon Consols may be opened up. I am at a loss to know how the adventurers could not have seen this long before.

ROSECLIFF AND TOLCARNE.—Rapid progress is being made in this mine. The engine-shaft has already been sunk from surface to the 30, and a cross-cut driven north about 12 fms., which has intersected Nos. 1 and 2 lodes, each one containing rich silver-lead ores, quite as much as can be expected at this level, and ere long Nos. 3 and 4 lodes will be reached, and being near the elvan course good deposits of lead are almost certain to be met with. The engine-shaft is again set to sink below the 30 with a full pare of men, and there is great credit due to the agents for the vigorous prosecution of this mine, as the money here has been spent in developing the mine, and not in fine buildings at surface.

GREAT WHEAL BADDERN.—I am glad to see that the 75 fathom level cross-cut is continued south of the engine-shaft, and that it has been already driven on the elvan course 16 or 17 fms. This has long been a discussed point, which will now be shortly proved. I am sorry that Capt. R. Pryor had not taken the management of the mine long before; if so, the adventurers would not have spent so much money in driving the cross-cut north, which will be proved to be a waste of time and money. Baddern lead lode is south, and will be before long intersected in the 75 fathom level cross-cut. How the former agents could not see it I am at a loss to know, as a man can walk on the elvan course from one end of the sett to the other.

FOREIGN MINES.

ALTEN AND QUÆNANGEN.—April 4: Estimated produce for March:

Mines.	Ore.	Per cent.	Copper.
Raipas .....Tons	22	5	1·100
Old Mine	140	4¼	5·950
United	14	5	0·700
Quænangen	70	5	3·500
Total .....Tons	246		11·250

RAIPAS.—The shoot of ore in the 30 fm. level foot stope holds down with tolerable regularity, being from 1½ to 2 ft. wide, worth 3 tons per fm. Our only operation in the 20 is the sinking of the winze recently resumed from old No. 11 workings, which is in limestone of a congenial character. The south-west stope, above the 10, yields 1¼ ton of good quality ore per fm. In the other stope, in the same working, the lode is 2½ ft. wide, consisting chiefly of barytes, with a mixture of orey work. The shallow adit foot stope yields some good quality ore, but the lode is still small and irregular.

OLD MINE.—In the 10 fm. working, south of Santo's cross-cut, the lode varies from 6 to 8 ft. in width, the lower portion of which shows a good intermixture of ore, fully 3 tons per fm.; but owing to the presence of the facings, &c., alluded to in our last, the upper part is less rich, though the indications continue of a promising description. The lode in the 10 fm. winze is from 4 to 5 ft. wide, composed of quartz and calc-spar, yielding about 2¼ tons of ore per fm. In the roof of the 10, where three stopes are being wrought, the lode is irregular in size, varying from 2 to 6 ft. in width, yielding on an average 3 tons of ore per fm. A slide has recently been met with in the level on the north-east branch, which is much diminished in size and value, and should there not soon be a change for the better we shall remove the men to a more productive point. On the whole, the south workings continue to present favourable appearances, and on the return of the summer, when able to return all the produce, we anticipate favourable results. In No. 1 side stope, north working, the lode is 4 ft. wide, worth 2¼ tons of ore per fm. In the 10 fm. stope the lode continues to yield from 3½ to 4 tons of ore per fm., which, as before, is mostly found against the footwall, the other portions of the vein being coarse and highly quartzose. In the 5 fm. foot stope the lode is 7 ft. wide, yielding 3 tons of ore per fm. The matrix here is mostly composed of a mild calc-spar. In the bottom of the 5 fm. level, north of cross-course, the lode is from 3 to 5 ft. wide, with good saving work irregularly intermixed. This part has not been very rich of late, though good bunches of ore ground are occasionally met with; the chief object is to open and develope the lode northward as much as possible, having no other working in advance. In the roof of the 5 there is but little change to note, our operations being confined to stoping some orey ground near Pederson's rise, which turns out about 2¼ tons of ore per fm., the quality of which is rather mundicky.

QUÆNANGEN.—There has been but little change in the width of the orey ground at Cedars since our last, but we are glad to say that the quality in the deepest part has rather improved, and the appearances more favourable. In the shallow stope the quality is still rather mundicky, but not to such an extent as before, and seeing that the orey ground is holding forth tolerably regular we have strong hopes that it will expand and unite with that below again to the north-west. The long Easter holidays just passed have, as usual, greatly interrupted our operations, otherwise the result for March would be more favourable, as our general prospects are much more encouraging than a few weeks since. Our month ended on Saturday last, and we are now engaged cleaning up the produce to return to the smelting-house as early as possible.—C. TRELEASE.

NEW WILDBERG.—James Sanders, April 21: The ground in Carter's shaft is without change to notice. The water is somewhat increased, rendering our progress in sinking somewhat slow. No lode has been met with as yet in the 40 cross-cut, and the ground remains as last reported. We have a pare of men driving the 40 east on the Erbteilstergang. The lode is composed of schiefer, quartz, grauwacke, and ironstone, but is unproductive for lead ore, and is letting out a great quantity of water. The drivage in the 30, under Davey's stopes, is improved, being now worth 2 tons per lachter. Nothing has been done in No. 1 sink, below the 30, for the past week, in consequence of some of the men being unwell, or cultivating their land. Conder's shoot of ore below the 30 is worth 2 tons per lachter, and the stope above the level east of winze 1½ ton per lachter. Davey's stopes, below the 20, are worth 2½ tons per lachter; the stope above the level is poor. At the same level, driving west of Michael's shaft, the lode is unproductive. The cross-cut south from this place is extended 5 ft.; we are not yet through the lode, but the part driven through is worth from 20 to 25 centners per cubic lachter. Johannes' sink below the deep adit is worth 1½ ton; and the stope above the level 2 tons per lachter. The deep adit drivage on the Johannes' Trum, towards the Erbteilfatergang, is yielding good stones of ore; this point is near the junction of the lodes, so that we hope for an improvement. Beck's sink is 2 lachters below the 10; the ground being composed of schiefer and quartz, with occasional stones of ore. The water in the trial shaft is not yet abated, but we hope, with dry weather, to be able to resume sinking.

LUSITANIAN.—Palhal Mine, April 10: The lode in Taylor's shaft is worth 2½ tons per fm. Perez' shaft is completed to the 50, and the men removed to sink River shaft, where the lode is worth 1 ton per fm. Oak shaft is still hard. We are down to the 60, and shall begin to cut a plat forthwith. The 100, east of Taylor's, is worth ½ ton per fm. The 100, west of the same shaft, is worth ½ ton per fm. The 90 east is suspended. The rise against No. 61 winze is worth ¾ ton per fm. The 90, west of Taylor's, is composed of flookan. In the 80, east of the same shaft, the lode is worth 1 ton per fm. The 80, west of Domingo's winze, is suspended, and the men put to sink a winze, where the lode is worth nearly 1 ton per fm. The lode in the 70, east of River shaft, is composed of flookan. The 28, west of Perez' shaft, is worth ½ ton per fm. The 70, west of River shaft, is worth ½ ton per fm. The 80, east of the slide lode, is worth ¾ ton per fm. The 70 fm. level, west of Taylor's, is suspended. The 28 fm. level, east of the slide lode, is producing good stones of ore. The ground in the 50 fm. level cross-cut is improved, we have gone through several branches, but none of value. The ground in the 60 fm. level cross-cut is also improved. The 20 fm. level cross-cut is still hard for driving. No. 58 winze is worth ½ ton per fathom.—Stopes: The stopes above the adit, west of Perez' shaft, are worth ½ ton per fm. The stopes above the 18, west of Fonsaca's winze, ½ ton per fm. The stopes above the 60, west of Joaquim's winze, ¾ ton per fm. The stopes above the 60, east of River shaft, ¾ ton per fathom. The stopes above the 70, between Taylor's and River shafts, 1 ton per fathom. The stopes above the 80, east of Domingo's winze, 1 ton per fm. The stopes above the 70, east of Nunez' winze, 2½ tons per fm. The stopes above the 80, east and west of Riberio's winze, 1 ton per fm. The stopes above the 80, west of Taylor's shaft, ½ ton per fm. The stopes above the 90, east of ditto, 1 ton per fm. The stopes above the 90, west of Semoe's winze, ½ ton per fm. The stopes above the 60, east and west of Dia's winze, ¾ ton per fm. The stopes above the 70, east of Campino's winze, ½ ton per fm. The stopes above the 50 east of Norte's winze, ¾ ton per fm. The stopes above the 50, east of Machado's winze, ¾ ton per fm. The stopes above the 60, west of Jacintho's winze, ½ ton per fm.—Carvalhal Mine: The lode at the incline shaft seems to be improving, but at present it has nothing to value. The 30 west has two branches, each about 6 in. wide, yielding stones of lead. The 30 east is composed of quartz and lead. The 20, west of incline shaft, contains quartz, mundic, blende, and stones of ore. In the 20 east the lode contains quartz and lead, but not to value. The 10 west is composed of quartz. No. 2 winze, below the adit, is composed of quartz, gossan, blende, and mundic. No. 3 winze is worth 1 ton per fm. The stope above the 20, west of incline shaft, is worth ¾ ton per fathom.

PRODUCTION OF SOFT SULPHUR.—M. Moutier has shown that sulphur heated with 1·4000th of its weight of iodine becomes, by cooling, soft, plastic, and in great part insoluable in sulphide of carbon. He also shows that several organic substances, such as naphthaline, paraffin, creasote, camphor, and turpentine, modify sulphur in the same manner, when employed in about the same proportions. The temperature to which the sulphur must be heated varies with the nature of the substances added; thus, camphor effects a change at a temperature of 230° C., while naphthaline and turpentine require a much greater heat. The author was led to believe that it was the carbon in those substances which was influential, and he, therefore, made experiments with that body. He found that one part of carbon with 1000 parts of sulphur, at a temperature of 270° C., effected the same modification.—*Journ. de Pharm.*

MAHOGANY RAILWAY SLEEPERS.—From Western Australia we learn that an engagement has been entered into to deliver on board a ship at Freemantle 600 loads of mahogany sleepers for the Indian railway, at 3*l.* 13*s.* 6*d.* per load. Millions of acres in the colony produce a timber which no other part of the world produces, and it is virtually indestructible by white ant and sea-worm.

LONDON GENERAL OMNIBUS COMPANY.—The traffic receipts for the week ending April 22 was 12,185*l.* 5*s.* 10*d.*

Mining Correspondence.

BRITISH MINES.

BAGTOR.—W. Hosking, April 26: We have six men engaged driving the 30 end, west of Prosper engine-shaft, and are making the greatest efforts to extend it as rapidly as possible, though the ground being hard prevents our making such progress as we could wish for. We are, however, daily expecting an improvement in the ground, accompanied by an improvement also in the lode, as the end is now but a few fathoms behind the point at which we experienced an improvement at the level above. In the 20 end, driving east of Quickbeam engine-shaft, the lode is now 2 ft. wide, of the most congenial character, and carrying a little tin throughout. Our machinery is in the best working order.

BEDFORD UNITED.—J. Phillips, April 25: We are driving by the side of the lode in the 103 west. There has been no change to notice in the Tavistock lode in the past week. The stopes throughout the mine continue to yield the same quantity of ore as last reported.

BEDOL-AUR.—H. R. Harvey, April 25: The ground continues hard at Crofts' shaft, with a little more water. The 77 end west, on the Coetia Wain vein, is still unproductive, but very promising. The pitch in back of the same is as last reported. The pitch in bottom of the 70 has been suspended.

BOTTLE HILL.—J. Eddy, April 27: The lode in the 17, west of the western shaft, still holds its size, from 7 to 8 ft. wide, and turning out moderate stamps work. The lode east of shaft, in the same level, is about 5 ft. wide, and improved in quality this last week. We have now driven this level both east and west of shaft sufficiently to enable us to put two pares of men stoping the back of the level; we intend letting this to-morrow. There is no alteration in the lode in the 34, east of Williams's shaft, since last reported. The tribute ground east and west of new shaft is about the same as it has been for some time past. The tributers are making wages.—South, or Copper Lode: The ground in the 12, west of shaft, appears to be altering, now rather easier for working; the lode in the present end is about 1 ft. wide, and producing much the same character stuff as we found in the lode in the adit level further west before we met with the copper ore.

BRONFLOYD UNITED.—T. Kemp, April 25: The several bargains throughout the mine are without any change to notice since last week.

BRYN GWIOG.—S. Harper, April 25: In the 102, driving east from engine-shaft, the lode is at present in a very desordered state, and poor. The lode in the rise in the back of this level is still large, and producing good lumps of lead ore; we hope to communicate this rise to Robert's winze in about a fortnight's time. The lode in the 90, driving east from the said shaft, is 2 ft. wide, worth 1¼ ton of lead ore per fathom, and promises for further improvement. Robert's winze, in bottom of this level, is without alteration since last reported on. The lode in the stopes in back and bottom of this level (the 90), east of shaft, is still worth 1¼ ton per fathom. The lode in the 90, west of shaft, is worth 1¼ ton per fm. There is no change to notice in the 75 east since last report. In the same level, west of shaft, we commenced taking up the lode on Monday, and are pleased say that it is 3 ft. wide in the bottom of the level for about 2 feet high, then closing in to about 1 foot wide in the upper part of the level—a very nice lode of lead; this branch of lead seems to be going down east on an incline, therefore it will rise as we go on with the level west. This looks well for the east part of the mine. Our pitches throughout are much the same as for some time past, with the exception of Brooks's pitch, in back of the 66, which has fallen off in value since last report, worth 4 tons per fathom.

BRYN GWYN.—Henry Nottingham, April 21: We are still driving south from the sumps under the incline east of shaft, but not on the same part of the joint, and on a higher level; this driving is yielding a small quantity of lead, and ground easier for driving. The north-west driving, on the north side of incline, is without change, as I have had the men trying the north and south joint, mentioned in my last report. We have had a small quantity of lead from it, but the joint being narrow we have left it to resume driving the end west. The level driving south-west from the middle of incline, east of shaft, is not yielding quite so much lead, and the joint closer. The cross-cut driving west from the lower level, south-west from incline, is rather hard and slow for progress. We have about 2 fms. more to drive to intersect the joint going south from the middle of incline. Clark's level, driving north from the sumps under the old incline, is yielding 1 ton of lead per fathom, and ground rather easier for driving. We have 3 fms. more to drive before reaching the old workings, but this is now carrying from 2 to 3 fms. deeper than any of the old levels, and there is no indication of it rising yet, so that I am now expecting it to extend under the old workings. We have sampled 5 tons of smalls and 3 tons of round ore, to be sold on Thursday next.

CAPE CORNWALL.—R. P. Goldsworthy, April 25: The lode in the 100 end east and in the stopes is without change; this remark will apply to the 90 end east. The lode in the 90 fathom level stope east (6 ft. wide) is producing 2½ cwts. tin to the 100 sacks. The lode in the 90 end west has improved, producing good stones of tin; we may safely calculate on having a run of tin ground in this level, similar to that which we are working upon in the 80. The 80 fm. level stopes are producing tinstuff, worth 2½ cwts. tin to the 100 sacks; we are stoping the ground at an average of 30*s.* per fm. The lode in the 70 end west is very promising, from which we broke stones sprigged with rich yellow copper ore yesterday; this end is extended 105 fms. from the engine-shaft. We shall get the roof on the boiler-house, and clothe the steam-pipes, without delay. We are preparing the cage for drawing with all possible speed.

CALSTOCK CONSOLS.—W. B. Collom, April 26: Danescombe Lode East: The lode in the drivaga east continues as last reported, being composed of fluor-spar, quartz, ore, and mundic, and yielding 2 tons of ore to the fathom. No change in the other parts of the mine.

CARADON CONSOLS.—J. Bennetts, April 23: In presenting you with the usual quarterly report, I find the quantity of ground expended during the past three months to be as follows:—In the 80 west end, on Govett's (or Clymo's) lode, 8 fms.; east at the same level, on the same lode, 2¼ fms.; and in the rise in back of this level 6¼ fms., making it 8½ fms. above the level. A few feet only have been driven in the 70 east, on the Menadue lode, which produced some good yellow ore; lode 3 feet wide. The former lode near the cross-course is very much disordered, and continues more or less so for some 8 to 10 fms., although in this unsettled portion the lode has never been without good stones of yellow ore, and other very promising indications, but it is very satisfatory to find in the last 4 fms. driving west (which end is now about 16 fms. from the cross-course) the lode has become well defined, of a fair average width—about 2 ft., and also a good paying lode, worth on a average 10*l.* per fm., and still continuing in the present end of about the same value, and over 2 feet wide. The composition of the lode in this end, in addition to the copper, is fluor-spar in abundance, mixed with peach (chlorite). The lode in the east end has also been of a very promising although of a different character; here it has seldom been without gossan, and never without some rich ore, but very fluctuating in quantity; this end being only 5½ fms. from the cross-course, can scarcely be considered free from its influence. In the present end the lode is about 1 foot wide, but not quite so orey as last reported. I think, as this end gets further from the cross-course, it will also improve, unless it be too much in the gossan, in which case a deeper level only will develope it. The rise being close by the cross-course, the lode here has been quite unsettled throughout. In the first 3 to 4 fms. we saw no gossan, and the copper in the lode was black, and yellow coated, black, and grey; but, latterly, the lode has changed, become very gossany, and the ore of the red oxide and grey varieties; last week we had a leader of this sort of ore 4 to 6 in. wide, very rich; but now in the back the lode is composed almost entirely of gossan, consequently near the cross-course above this I think the chances of finding much ore are small, although a few fathoms away from its influence I think there is likely to be found some good bunches of ore above this point. From what has been stated, you will perceive the necessity of effecting a communication from the 80 with some other level, for the purposes of ventilation, &c., as soon as possible; and as the 54 is by far the furthest advanced towards this lode, we have set six men to clear out that level, with a view to effect such communication forthwith. The level is now cleared and secured to within 4 fms. of the end, where another break is met with; this, however, we hope to complete in a few days, and at once push on the end to cut the Govett's lode. According to its underlie in the 80, I think about 7 fms. further will accomplish it; in easy ground this will not occupy long. On the whole, I think the improved prospects of the mine in the south part of the sett are of the most cheering character, and such as will ultimately lead to a profitable result. The three important points to be pushed on with energy are the 80 west, the rise, and the 54 cross-cut, and winze to meet with the rise as soon as the lode is intersected; the east end may be continued by two or more men, if thought advisable.

CARADON AND PHŒNIX CONSOLS.—Wm. Richards, April 26: The ground in the engine-shaft, sinking below the 40, is compact granite at the present time; the lode in the bottom of which is 3½ ft. wide, containing capel, quartz, peach, mundic, and some good quality copper ore. The engineers are getting on well with the erection of the new wheel, and will get on with the other parts of the new work as fast as we can.

CASTELL CARN DOCHAN (Gold).—J. Parry, April 25: There is no alteration in the underground working since my last report, except that a little more visible gold has been discovered in No. 3 stope. The gold obtained from the amalgamators to-day is 9 ozs. 6 dwts.; it is less than usual, because we were obliged to stop the stamps for repairs last week. We shall commence on Tuesday morning to get the remainder of this month's produce. The stuff stamped up till to-day is 161 tons. All the machinery is now in good order, and works well.

CENTRAL MINERA.—T. Hughes, April 26: Victoria Engine-shaft: The 60 yard level, driving east, is in favourable ground for progress, and promising for lead. The rise in the back of this level has very much improved, now producing 15 cwts. of lead per fathom, and very promising.

CENTRAL SNAILBEACH.—J. Kitto, April 23: The sinking of the engine-shaft below the 72 is progressing satisfactorily, and will be down for another 15 fm. level by the time mentioned in my previous reports. The ground in the 72, driving east towards the old mine, is unusually hard, but the lode still maintains its size, and is more than ordinarily promising. I have no doubt that the result of deeper workings will equal, if not exceed, the most sanguine expectations.

CLARA UNITED.—J. Davis, April 25: Llywernog: The lode in the 50 is a little less productive; the present end is worth 15 cwts. of lead per cubic fathom. The character of the lode continues very promising, and I expect it will soon improve in value again. The stope in the back of this level continues to yield 8 cwts. of lead per fm. In the 40 west the lode produces 12 cwts. of lead per cubic fathom. Surface operations are going on regularly.

CLOWANCE WOOD CONSOLS.—E. Chegwin, April 25: Since my last report of this mine the shaftmen have got on favourably in sinking the engine-shaft below the 20; they are at present engaged cutting ground for bearers and cistern. The water has, I am glad to state, very considerably decreased, the engine not working so fast by two strokes per minute.

CRENVER AND WHEAL ABRAHAM.—W. Kitto, April 26: We have got through the choke in both engine-shafts, and shall drop to-morrow 15 fms. below the 50. I expect we shall be engaged for three or four days drawing away the stuff from the old balance bob-plat at Wilson's 60 fm. level; we shall then see our position, and if found necessary shall fix a cistern and bearer at that point, also at the middle engine-shaft as well. We shall be guided in a measure as to where the old cistern-plats and hitches for bearers have been cut; it will save a great deal of time and expense, in order to facilitate the draining of those mines. We are busily engaged putting up shaft-tackle and pulley-stands from Wilson's machine-whim to Old Crenver engine-shaft, and we hope to complete it in another week, we shall then be able to clear up this shaft, when the steam-capstan is not using at Wilson's shaft about the pitwork. The season of the year has arrived, and we shall push on the surface operations with all the dispatch possible. I need not detail to you what they are, because in all mines of this magnitude they are too numerous to particularise. We have several men still engaged laundering, and taking up water at the adit levels throughout those mines, which I think will be of great benefit when done. The tributers are dressing their copper ore, and shall have dressed up in another fortnight fit for the market about 110 tons of average quality.

CROWAN AND WENDRON.—R. Reynolds, April 24: The lode in the engine-shaft is 4 ft. wide, composed of quartz, peach, prian, and a little grey and yellow copper ore, but at present not quite enough to value. We have about 3 fms. more to sink to complete the lift. We have put two men to sink the winze below the 36 to communicate with the rise in back of the 48.

CUDDRA.—F. Puckey, A. Cundy, April 24: The ground in Walker's shaft is somewhat harder for sinking. We are now down 11½ fms. below the 117. At the 117, in the end driving west of Walker's shaft, the lode is of extraordinary size, of which we

are carrying about 10 ft., producing tin throughout, worth 50*l.* per fm. for that width. In cutting out the lode to the east of the cross-cut in the above level, the tin part has made a splice, in consequence of a branch of gossan crossing the lode. We are now cutting out the lode to the north of this gossan, where it looks promising to resume its former value of 20*l.* We are also cutting out the lode further east in the same level, where it is from 10 to 12 ft. wide, producing saving work, and kindly for further improvement. In No. 1 stope, in bottom of the 105, the tinny part of the lode is 7 ft. wide, and worth 26*l.* per fm. for that width. In No. 2 stope, in bottom of the same level, the lode is 10 ft. wide, and worth 20*l.* per fm. for that width. Owing to the very low price of tin we consider it prudent to stop stoping in those places, which in consequence thereof are not for the time profitably productive. The other operations of the mine are going on as usual.

CUDDRA.—Jehu Hitchins, April 25: My recent inspection of this mine fully enables me to endorse the reports given from time to time by the agents, and to state, for the satisfaction of the company, that the prospects to my view are most satisfactory, the 117 end showing a strong lode, fully 10 ft. wide, and worth at the least 1 ton of tin ore per fm. The shaft likewise is now nearly sunk for a 120, which from all I can see in the levels above, and the sheet of tinny ground gone down, I augur satisfactory results, and that you will be obliged soon to increase your stamping appliances, in order to keep pace with the work to be raised to increase your returns.

DALE.—R. Niness, April 23: The stopes are not yielding so well as they have done, but look likely to improve. In No. 11 winze we have put in the lift, and shall finish bringing the upper water into the lodge to-day, and I expect the sinking of the winze will be resumed some time to-night. The vein that was intersected in driving on Johnson's lode in the old mine is still composed of clay, spar, chert, stones of lead, and has at this time every appearance of a pipe vein, which I believe will prove of great value.

DARREN.—R. Williams, April 25: The sinking of the shaft below the 15 is progressing fairly, down below that level 3 fms. The 15 west has advanced 12 fms. west of the stope, and we shall now begin to open out the lode, and we hope to find it good, as there is a good branch of ore holding on in that direction in the breast of the stope. We are progressing to lay down a tramway in the 15 to facilitate the removal of the stuff to the shaft. In Oliver's we have resumed the driving west, as we are satisfied there is no more lode of value to the south; the ground in the end has rather improved for progress. The ground in Tank's cross-cut continues of the same character as for some time past. On the whole, our progress towards the object in view is satisfactory.

EAST CARADON.—John Truscott, April 25: Caunter Lode: The 70 east is poor; the 80 east is worth 8*l.*; and the 90 east, 18*l.* per fathom; the 90 west is poor.—South Lode: The 60 east produces stones of ore; the 70 east is worth 8*l.*; and the 70 west, 10*l.* per fm.; the 80 east produces stones of ore.—New Lode: The 70 west is worth 6*l.* per fathom.—Fawcett's Lode: The 70 west is worth 5*l.* per fm.

EAST CARN BREA.—Thos. Glanville, April 25: We have sampled to-day 326 tons of copper ore.

EAST CHIVERTON.—J. Grose, J. Nancarrow, April 25: In the 35 cross-cut, south from engine-shaft, we are at last through the great elvan course which has been in this cross-cut about 40 fms. wide; the end is at present in soft light blue killas, and very congenial for making silver-lead. We have opened 5 fms. east on the branch met with about a fortnight ago in this cross-cut, which produced prian, flookan, mundic, and spots of blende, but not to value; owing to the wet, heavy nature of the ground being so expensive for timber, we have suspended this for the present. In the shallow cross-cut north the ground is spare for driving. The engine and pitwork are in good order, and working well.

EAST DARREN.—April 26: The lode in the 116, east of Taylor's shaft, is 1¼ foot wide, with small spots of ore. In the 104 east the lode is from 3 to 4 ft. wide, producing 1¼ ton of ore per fm. The stope over this level is yielding from 10 to 12 cwts. of ore per fathom. In the 92 east the lode is very much broken up by soft and disordered ground. In the 92 west the lode is from 4 to 5 ft. wide, composed of grit, carbonate of lime, stones of ore at times, but not to value. In the 80 east the lode is 4 ft. wide, not looking so well as when last reported, producing 1 ton of ore per fm. In the 80 west the lode is small and unproductive at present. In the winze sinking below the 80 the lode is from 2 to 3 ft. wide, yielding about 1½ ton of ore per fathom. We have eight tribute pitches working, yielding on an average 1 ton of lead ore per fathom. We shall sample on 1st May 75 tons of lead ore.

EAST GUNNISLAKE AND SOUTH BEDFORD.—J. Phillips, April 26: The lode in the deep adit is 4 ft. wide, of which 2 ft. is mundic, spotted throughout with ore—a very kind'y lode. In the shallow adit the lode is 5 ft. wide, composed of spar, prian, and a little black ore. We are driving by the side of the lode in the Chimney Rock adit.

EAST JANE.—J. Seccombe, T. Hodge, April 26: The 48 south, on the western lode, has improved, and now producing saving work for lead, presenting a good appearance; in the same level, on the eastern lode, it is small, and the ground harder. The ground in the 36 south is very favourable, and the lode unaltered. The rise in back of the 48, and the winze below the 36, are producing a little lead.

EAST PROVIDENCE.—J. Nancarrow, W. White, April 25: Boorman's shaft is in regular course of sinking below the 82, and the men are making fair progress. The lode in the 82 east seems large, and is about to be taken down. The 70 east yields a little tin, and the lode is letting out more water than usual. The lode in the 50 east is worth 6*l.* per fm. The pitches look as well as they did at the setting.

EAST ROSEWARNE.—John James, April 26: We have commenced to sink King's shaft below the 85, in the elvan course; the lode is 1 foot wide, producing good stones of ore. In the 85, east of King's, the lode is small and poor. In the 85, west of King's, the lode is split into two parts, and not so productive as when last reported, now worth about 5*l.* per fathom. I have no doubt but that these ends will improve shortly, both being now at the junction of the elvans with the killas, where we frequently find the lode disordered. In the 85, east of Hallett's shaft, the lode is small and poor. In the 85, west of Hallett's shaft, the lode is 14 in. wide, worth 15*l.* per fathom. There is no change to notice in the stopes since last reported. We sampled on Tuesday last (computed) 147 tons of good quality ore.

EAST ST. JUST UNITED.—J. Carthew, P. Casley, April 24: We have resumed the sinking of the Cranjack shaft below the 20; the lode is large and kindly in the shaft, as also in the 20, east of the shaft. In the 10 east, and in the backs over, we have broken some rich tinstuff during the last month; at present the end is very kindly. We had hoped ere this to have got to the bottom of North Besorne shaft, but it will take us this week to complete the work. We are making fair progress in Wheal Venton shaft; the more we see of this lode the more we are inclined to think that it is likely to turn out well. No change in Wheal Widden tribute pitches.

EAST WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, April 25: The lode at the engine-shaft, sinking below the 85, is from 1 ft. to 15 in. wide, composed of quartz and prian, producing a little tin, with stones of black ore. The lode in the 85 west is 3 feet wide, composed of quartz, &c., with good ore, worth 2½ tons per fm. The lode in the stope above this level is worth 4 tons of ore per fm. The ground in the 75 cross-cut north is very favourable for driving, and looking very promising for being near the lode. The lode in the stope below the 75, and west of winze, is yielding ore and tin to the value of 25*l.* per fm. Two stopes above the 75 west are worth 7*l.* per fathom each, and one stopes above the 65 west worth 8*l.* per fathom. The stope above the 55 west is worth 7*l.* per fathom for ore and tin. All other places the same as last reported.

EAST WHEAL LOVELL.—R. Quentrall, April 25: North Lode: In the new shaft, sinking below the 45, the lode is worth 45*l.* per fm. The stope in the back of the 45, west of new shaft, is worth 15*l.* to 20*l.* per fm. The stope in the back of the 45 east is worth from 70*l.* to 80*l.* per fm.—South Lode: The 40, driving west, is worth from 25*l.* to 30*l.* per fm. In the stopes in the back of the 40 the lode is worth 35*l.* per fm. The stope in the back of the 40, east of cross-cut, is worth 20*l.* per fm.

EAST WHEAL TOLGUS.—April 24: We have cut a lode in the 34 cross-cut south, which is, as far as we can see of it, 2 ft. wide, but it is not cut through yet; it consists of capel, spar, mundic, blende, spots of ore, and letting out a quantity of water. We shall be able to say more about it on Friday next or Saturday, as by that time we hope the men will cut it through. In the adit level cross-cut south the ground continues to be moderately easy for driving.

FOWEY CONSOLS.—F. Puckey, C. Merratt, G. Job, April 23: Trathan's Lode: In the 280, east of Bottrall's shaft, the lode is 4 ft. wide, producing a little copper ore; the lode in this end is hard and spare for driving. We now intend driving in the killas by the side of the lode to communicate with the winze sunk below the 270 as soon as possible for ventilation. In the 270 east the lode is 4 ft. wide, and orey throughout, worth 10*l.* per fm. In the eastern stope, in the back of this level, the lode is 3 ft. wide, and worth 12*l.* per fm. In the western stope the lode is 4 ft. wide, and worth 15*l.* per fathom. In the 260 east the lode is 1 ft. wide, but at present unproductive.—Hewett's Lode: In the 180, west of Union shaft, the lode is 6 in. wide, and still poor. In the 200 west the lode is 2 ft. wide, and worth 8*l.* per fm. In the 220 and 240 fathom level ends the lode is small, and at present unproductive. The north lodes are without alteration since last reported on. We are driving six cross-cuts on speculation in different parts of the mine to prove different lodes at the various levels, and we entertain strong hopes that our operations therein will lead to some good discoveries.

FRANK MILLS.—J. P. Nicholls, J. Cornish, F. Cornish, April 25: We have turned and commenced to drive north on the west part of the west lode at the 130; this part of the lode is yielding saving work at present, and looking well for an early improvement. We have commenced a winze in bottom of the 115, on the west lode, to ventilate the 130, &c., where the lode is yielding from 4 to 5 cwts. of lead ore per fm. The west part of the lode, which we are carrying in the rise in the back of this level, is at present only yielding occasional stones of lead ore. The lode in the stope in the back of this level is still yielding ¼ ton of lead ore per fm. The part of lode we are carrying in the winze in bottom of the 100, going down against the rise, is only yielding occasional stones of ore; we expect to effect a communication here during the present week. The two stopes in back of the 100 are yielding respectively ½ ton and 9 cwts. of lead ore per fathom. The 100 south is unproductive at present. The lode in the wide stopes, in back of the 45 north, is yielding on an average ½ ton of lead ore per fm. We have not intersected any more lode in the 45 cross-cut west, north from engine-shaft, but have commenced to drive both north and south on the east lode gone through in this cross-cut. The lode in each end will yield from 3 to 4 cwts. of lead ore per fathom, and the ground exceedingly good for progress. All our machinery is in good condition, and working satisfactorily.

FURSDON.—J. Collins, April 25: The engine-shaft is in the same character ground as for some time past, and progress slow. The 31 west is 22 fathoms west of shaft. No change in the ground to notice since last week. The pitch in back of the 21 west is poor. The pitch in back of the 11 east is still worth 12*l.* per fathom.

FURZE HILL WOOD.—Wm. Doidge, April 26: No. 1 North Lode: In the 54 east the lode has considerably improved both in size and quality, being now 5 ft. wide, and worth 7*l.* per fm. for tin, with a promising appearance. The 54 west is suspended for the time being. The stope in the back of this level is worth 8*l.* per fm. for tin. In the 40 east there is no change to notice since my last report; the same remarks will apply to the stopes in the back of this level. The engine and stamps are working well, and water easy.

GAWTON.—G. Rowe, G. Rowe, jun., April 21: There is no particular change in the general character of the ground in the engine-shaft sinking below the 50, and the progress is very satisfactory; we calculate to be down a sufficient depth for a 60 fm. level by the end of the present month. The lode in the 58 west is improving in character, and worth from 3 to 4 tons of ore per fm. The 50 east is looking well, and producing about the same quantity of ore. The lode in the 40 west is worth 2 tons of good ore per fm.; the lode in the rise in back of this level is worth 5 tons of ore per fm. The lode in the winze sinking below the 36 is showing a very kindly appearance, the part being carried on the south wall is about 3 feet wide, worth 4 tons of ore per fm.; the remaining part of the lode is still standing to the north, which we calculate is some 15 or 16 feet wide. The western stopes, in back of this level, are worth 3 tons of ore per fm.; the old stopes being for the time suspended. We are doing our best in clearing the staff from the 50 west, in the old mine, and getting near the end. Our surface operations in erecting steam-whim, crusher, &c., are progressing very satisfactorily. The engineers, smiths, and carpenters are all engaged in their work from morning until dark every day. We are exceedingly busy in preparing for our next sampling, which we calculate will be nearly 100 tons of copper ore.

GOGINAN.—April 25: The lode at the drift over the 100, going west of the rise, is 3 ft. 6 in. wide, yielding 15 cwts. of lead ore per fm. The lode in the three stopes over the 100, east of Gilbertson's shaft, varies from 4 to 6 feet wide, yielding on an average 15 cwts. of lead ore per fathom; these points are being pushed on with all dispatch. The tribute pitches, four in number, are yielding on an average 12 cwts. of lead ore per fm. The stope over the 60, 10 fms. east of shaft, at Level Nwydd, is in a lode 4 ft. wide, yielding 11 cwts. of lead ore per fm. We are getting on as fast as we can with the fixing of rods, &c., in the adit level west from engine-shaft, in order to throw out the water from the Bwich workings below this level, which, when completed, will enable us to drive on the 70, under those workings, where there are good bunches of ore seen gone down.

GREAT BRIGAN.—J. Tredinnick, April 25: The lode has not been taken down in either of the stopes during the past week; the value of the lode is as last reported.

GREAT MONA (Isle of Man).—John Kitto, April 19: During the past month the underground operations have undergone no change of sufficient importance to call for any special remark. The ground in the adit level, driving west from the cliff, has become easier, and the lode increased in size, and producing some good spots of copper ore. In the costean pits, in search of the two north and south lodes near the beach and at Cornes Bridge, the indications are such as to justify the opinion that in each case we are very near the lode. The works, preparatory to the erection of wheel and pumping machinery, are progressing satisfactorily. In cutting the tail-race we have intersected a very promising looking lode, bearing nearly east and west, which will form a junction with the north and south lode not far from the proposed engine-shaft, and which, I have no doubt, will produce a very beneficial influence, and add considerably to the importance of this hitherto very interesting part of the property. The masons are now getting on fast with the building of smithey, workshop, storehouse, and office, and in a few days, with fine weather, will have the walls at their required height.

GREAT NORTH DOWNS.—W. Rich, M. Jenkin, April 25: The 70, west of Sleggan's shaft, is worth 8*l.* per fm. The 60 west is worth 8*l.* per fm. A stope in the back of this level is worth 6*l.* per fm. During the past week the water in Sleggan's shaft has been just to a standstill. There is nothing new to notice in the cross-cuts. At Butler's shaft we have driven a bar of iron through the attle 9 ft., and which seems to have touched the bottom of the shaft. We shall prove this in a few days. It appears from the old stulls as if this part of the mine had been very productive in former times; we find the lode is entirely worked away as deep as we have yet cleared up. Our object is to sink the shaft deeper, and open up new ground. We are pushing on the building of the engine-house at Sleggan's as fast as possible.

GREAT NORTH LAXEY.—R. Rowe, April 24: At the shaft the lode continues steadily to improve, and gives good promise; now 6 feet wide, with a rib of lead through the shaft increasing in width, and in more open ground, worth at present full 2 tons per fathom. The 72 north has a good lead going down in the sole, and in the rise going up from the 72 south the small ribs of ore continue as before. The roof of the 60 north is yielding good work, and is still looking very well. We have about 30 tons of lead at surface.

GREAT SOUTH CHIVERTON.—J. George, April 25: The cross-cut is being pushed on as fast as possible, the ground is good for progress, and in every way favourable for the production of lead.

GREAT WHEAL BADDERN.—R. Pryor, H. Tregoning, April 21: We have set to-day the 75 cross-cut to drive south of Hill Brothers shaft, by six men, at 12*l.* per fm., which is still in the elvan course, and the end letting out an increased quantity of water. We have also set the 63 cross-cut to drive south of the shaft, by four men, at 11*l.* per fathom; the ground in the end is much the same as when reported on last week, and we are daily expecting to cut the elvan at that point. These two important points are progressing very satisfactorily.

GREAT WHEAL BUSY.—W. Rich, John Tredinnick, Cornelius Bawden, April 21: We have communicated the winze below the 120 with the 130, and have commenced to stope the lode discovered in the cross-cut south of this winze, which is 4 ft. wide, and worth 15*l.* per fm. We have commenced to drive south to intersect it in the 110; from the position and underlie of the lode seen in the winze below the 120, there can be no doubt but that it is also standing south of the 110. The lode in the 130 end, east of Offord's shaft, appears to be gradually improving as we approach under the run of ore seen in the shallow levels. We find Rawling's shaft cannot be sunk below the 90, in consequence of the water being so powerful; our object in sinking this shaft was to take the dip of ore ground commonly known as Moyle's bottoms, and situated a few fathoms west of the shaft referred to, where the lode is 50 ft. wide. At and above the 90 it has yielded an abundance of copper and tin, but in the 100, which is driven nearly as far west as Rawling's shaft, there is no lode to be seen; in fact, the end of the 100 is entirely in the elvan. In going through the mine, and carefully observing the dip and bearing of this large elvan dyke, which is some 80 ft. wide where cut through, and underlies north, the Wheal Busy lode has a similar inclination north, and is in close proximity to the elvan, but to the south, or under it, we find the lode never penetrates the elvan to any extent, hence we think the lode to be standing south of the 100, under Rawling's shaft, we therefore purpose driving a cross-cut south, through the elvan, to prove it; could the shaft, however, have been sunk expeditiously below the 90, we should have done so, and thereby have proved it in going down, but under present circumstances we must put out a speculative cross-cut. These cross-cuts—the 100 at Rawling's, and in the 110, at Matthewa's shaft, will be 170 fathoms apart, are very interesting points, and will have an important bearing on the future of the mines; we think they offer good chances of success. The 110, 90, and 70 fm. level ends, east of Walker's shaft, are being urged on without delay, and although not rich, are not at all unpromising. We are sinking Walker's shaft below the 100, by nine men; the lode at the deepest point is worth 15*l.* per fm. The rise in the back of the 110 is worth 10*l.* per fm. We have not been able to fork the water in Harvey's engine-shaft as we expected. There has been 20 fms. of water in this shaft during the past winter, and just after putting the engine to pump it out, the clack failed under water, which has caused a great deal of inconvenience and delay. We hope we have now put this matter right again, and think we shall have the mine drained to the bottom by Monday or Tuesday next. We have holed the adit to Grant's shaft, but find we have to stope the ground driven over some months since, so as to bring in the water.

GRYLLS WHEAL FLORENCE.—Edward Rogers, Edmund Rogers, April 21: During the last three months we have driven the 22 west, on the Standard lode, 5 fms.; at this point we intersected the caunter, and have driven north on this lode 8 fms.; the greatest part of the ground driven through on the caunter lode will be taken away at a high tribute, which will leave a small profit on working. The end at the present time is driving by six men, at 3*l.* 10s. per fm.; the lode is 2½ ft. wide, worth 4*l.* per fm. At the 12, near the present end, on the caunter lode, we have sunk a winze in the bottom of the level 6 fms. 1 ft.; this winze is now sinking by four men, at 2*l.* 10s. per fm. and 13s. 4d. in 1*l.* for tin; the lode passed through in this winze will be taken away at a high tribute as soon as there is a communication made to the level below, which we expect will be accomplished in about a fortnight from this time. In our tribute department there are four men working at 14s. in 1*l.*, at a standard of 45*l.* per ton. With regard to future operations we would remark that the 22, on the caunter lode, has shown a little improvement, inasmuch that we expect to increase the number of tributers at the beginning of another month; taking this into consideration, and also the appearance of the standard lode gone down in the bottom, we certainly should recommend the sinking of the engine-shaft 10 fms. deeper, and also drive the 12 and 22 north on the caunter lode by a small number of men.

GWYDYR PARK.—W. Smyth, April 24: In Gwyn Lliffon adit we have cut a lode about 2 feet wide, composed of spar, mundic, blende, and strong spots of lead ore; it is underlying east about 2 ft. per fathom, and letting out a good deal of water. The east and west lode is quite disordered by it.

HALLENBEAGLE.—William Bawden, April 21: Pinnager's sumpmen are now engaged cutting ground for plat and tutwork. The 56, west of shaft, is without change since last reported. In the 56 east, on north lode, the lode has not been taken down for the past week. In the 56 fm. level cross-cut south, east of Pinniger's shaft, the ground is of much the same character as last reported. In the 40 fm. level, east of King's shaft, we are driving on the south part of the lode, which is 4 inches wide, producing stones of copper ore. Reed's shaftmen are engaged, six of them cutting plat, and six driving the 53 fm. level east end; the lode in this end is still split into branches. In the 53 fm. level west the lode is of much the same character as last reported, and worth 8*l.* per fathom. In the 43 fm. level, west of Roberts's lode, the lode is large, producing stones of copper ore. In the 33 fm. level, west of said shaft, the lode is still split into two branches, each producing saving work for copper ore. Winze sinking below the 23 fm. level, east of Bawden's shaft, I expect will be holed in a few days. In the 43 fm. level, east of cross-course, on Oates's lode, the lode is 12 inches wide, opening tribute ground. In the 43 fm. level, west of cross-course, the lode is split in two branches, and not producing so much ore as when last reported. Our machinery is working well.

HARWOOD.—J. Race, April 23: There has been no alteration at Scar Head during the past week worthy of notice. No. 1 stope is poorer at present. No. 2 stope is about as last reported, worth 1 ton of ore per fm. No. 3 stope is worth 3 tons of ore per fm. The end of the level going east in Trough is a little poorer to-day. Lock's level is still very hard. We are now progressing well with ore dressing, and have 40 tons broken and partly dressed.

HAWKMOOR.—Joseph Richards, April 24: The lode in the stopes in the back of the 30, east of eastern engine-shaft, is worth 2 tons of copper ore per fm.—West Hawkmoor: The cross-cut in the eastern side of the cross-course, in search of No. 4 lode, is resumed, and the ground very speedy for driving. The stopes in the back of the adit level, on No. 4 lode, produce a little tin ore.

LEAWOOD.—J. Nicholls, J. Daw, April 20: The ground at the engine-shaft is much improved for sinking, and we have set it to sink by nine men, at 25*l.* per fm., 4 fms. stent; this is 10*l.* per fm. below last price. We hope to complete it to the 40 in less than three months. We have set the 30 south to drive by six men, at 3*l.* per fm.; the lode in the end is fully 3 ft. wide, of a very promising appearance. The 19 north, on the western lead lode, is set to four men, to drive at 2*l.* 5s. per fathom; the lode is 2½ ft. wide, unproductive.

LEEDS AND ST. AUBYN.—J. Curtis, April 26: The 30 to drive east of the flat-rod shaft, by three men and three boys, at 85s. per fm.; the lode is 3 feet wide, with tin in it, but not much to value. The 20 to drive east of Grace's shaft, by four men, at 30s. per fm.; lode 2½ feet wide, worth about 2*l.* per fathom. The 10 to drive east of Harvey's shaft, by four men, at 30s. per fm. The 10 to drive east of Vivian's shaft, by two men, at 60s. per fm.; lode 1 foot wide, worth about 1*l.* per fm. We have 27 men on tribute, varying from 6s. 8d. to 13s. 4d. in 1*l.*

MAUDLIN.—J. Tregay, April 21: Old Mine: In the 80 end west the lode here is 4 feet wide, composed of mundic, peach, sper, and copper ore—a very kindly lode, promising an improvement, and letting out much water.—West Mine: The lode here is producing good stones of ore.

MINERA UNION.—W. T. Harris, April 26: Brabner's Shaft: The lode in the 80 yard level north has considerably improved for lead, and is very promising; I shall be better able to say what it is likely to do in the next report. The ground in the cross-cut to the Red Vein continues hard, but congenial for lead; the lode in the middle level is ½ foot wide, containing a little lead.—Williams's Shaft: The lode in the 60 yard level south is ¼ foot wide, containing a little lead. The lode in the winze sinking in bottom of this level north is 2 feet wide, worth 15 cwts. of lead per fm.; very promising.

MOLLAND.—T. Bennetts, April 25: In the 72 fathom level east we have commenced to drive from the eastern end of the winze referred to in my last, where a slide has come in from the north, cut the lode in two parts, and passed off to the south. In the bottom of the end, and under the said slide, the lode is seen about 2 ft. high, rising going east, composed of quartz, red iron, and spots of grey copper ore. However, we shall have to drive a few feet to get out of the influence of the slide before we can say much respecting its character and productiveness. The lode in the stopes in the back of the 62 fm. level east is 5 feet wide, producing 1¼ ton of grey ore per fathom. In the rise in the back of the 32 fm. level east, on the north part, we have met with a small cross branch, with good spots of ore in it. As I am inclined to believe this will lead to something more, I think it wise to continue the rise a few feet more, especially as the ground is easy.

NEW CLIFFORD.—J. Micheli, April 24: We shall have completed the fixing of our plunger-lift at Holland's engine-shaft to-morrow, and resumed the sinking on Thursday morning. At Weston's flat-rod shaft since we commenced to sink we have not made that progress which I expected, owing to the engine having to stop occasionally while fixing and sending down the work in Holland's shaft. Now that it is nearly finished I have no doubt that we shall be able to sink 9 feet a week; the lode is full 2 feet wide, composed of gossan, prian, spar, tin, and green carbonate of copper, altogether a very kindly lode indeed; and the country or stratum that it is embedded in is a beautiful white elvan, similar to the elvans in which most copper lodes in this district have yielded large and rich courses of ore.

NEW CLIFFORD—(*Special Report*).—John Nancarrow: This mine is situated in the parish of Gwennap, immediately east of the Tresavean and Penstruthal Mines, and north-west of the Clifford Amalgamated, and is, therefore, in one of the richest copper districts in Cornwall. The sett is 500 fms. long and 400 fms. wide. The stratum is killas. There are two large elvan courses, about 40 fms. apart, running east and west, and dipping fast to the north. The Tresavean main lode, and another further north, run through this ground, and also the Penstruthal lodes, on two of which the present operations are commenced. There is a 50-inch cylinder pumping-engine erected near the south elvan course, and 20 fathoms north of the back of the south lode, where an engine-shaft is sunk 26 fms., and the men are now fixing a plunger-lift preparatory to sinking below. The elvan has come into this shaft in the 26, and a cross-cut is driven into it 5 fms. south, where branches are intersected which will drop into the lode in depth, but the lode itself, which underlies north, and shows a strong back, containing mundic and copper, does not appear to be yet reached. The flat-rod shaft is 73 fms. north of the engine-shaft, and is down 3 fms. below the adit, or 12 fms. from surface. This shaft is being sunk on the north lode, which underlies north in the north elvan course. The lode in the shaft is for the present small, and contains a little tin, but is larger in the adit eastward, which is only cleared 7 fms., but the lode was worked for some considerable length on the back, and yielded a great deal of tin. The adit is driven 25 fms. west on this lode, which varies from 1 to 2 ft. wide, contains good-looking gossan, and in the bottom of the end would yield good tinstuff. There is a little ground stoped in the bottom of this level, but altogether there are not 20 fathoms of lode taken away from this working; still nearly a ton of tin has been sold, and upwards of a ton appears to have been raised. The north elvan course is from 30 to 40 fms. wide in the adit, and in this elvan there are three other lodes, all underlying south, each about 1 ft. wide, and each contains a little tin; the south ones of these are not driven on, but the north one is opened on at the adit for a few fathoms, and was worked near the surface for a great length for tin. The back of this lode is one with the lode in the flat-rod shaft, and whether they will continue separate in going down can only be determined by sinking. This mine is surrounded by mines which have yielded immense returns and profits, and though now only in its infancy, is likely to do well on being properly developed, and these lodes, which yield tin in the backs, may be expected to produce copper in depth, as do the lodes in the neighbouring mines. In addition to the engine, there are other commodious erections, such as carpenters and smiths' shops, account-house, &c., so that no further outlay on the surface will be immediately required.

NEW CORNISH.—J. Richards, April 20: At Latchley Consols, during the month the 60 has been driven east of engine-shaft 6 ft. by the side of the lode. The 50 has been driven east of engine-shaft and east of Sleep's winze 1 fm. 3 ft.; the lode is worth 1 ton of ore per fm., and is promising. The 40 has been driven east of engine-shaft and east of the cross-course 1 fm. 4 ft.; for 1 fm. 2 ft. of this extent the lode yielded ¼ and 1½ ton of ore per fathom. The lode in the present end is 2 ft. wide, composed of capel, mundic, and a little ore. In the stope in back of the 50, east of Sleep's winze, the lode is worth 2 tons of ore per fm. In the stope in back of the 40, west of Nankivell's rise, the lode is worth 3 tons of ore per fm.

NEW CROW HILL.—Wm. Trelease, April 24: The 70 east continues poor, so far ground good. The new stopes in back of the 55 seem to gradually improve; some parts of the old stopes do not look so well as they did last week, but they still show a fine-looking lode, worth in places 40*l.* per fm. The 35 east is still producing some fine stones of ore, worth, perhaps, 3 to 4 cwts. per fm. Louisa's shaft is without change. We are pushing on the dressing as fast as possible, and I hope to get ready for sale over 200*l.* worth of lead against our next pay.

NEW TRELAWNY.—E. H. Dingle, April 25: The lode in the adit level is about 1 foot 6 in. wide, composed of quartz, prian, mundic, spotted with yellow copper ore, and yielding by assay in places from 40 to 50 ounces of fine silver per ton; this end is end is let at 2*l.* 10s. per fm., and we intend to push it on so as to form a communication with the trial shaft as early as possible. We have again resumed the cutting down of the trial shaft; taken by six men, at per bargain, 7 fms. from surface, at 16*l.*, to be carried 12 feet long by 6 feet wide, the takers to pay all costs. The lode in this shaft is full 2½ feet wide, and presents the most kindly appearance of proving a rich lode at a shallow depth; it is composed of rich gossan, prian, and mundic, producing by assay from 20 to 30 ounces of silver per ton of stuff; we intend to erect the horse-whim at once, and then place nine men in the shaft, in order to get it down as deep as possibly during the summer months; we hope to get it down with the whim at least 20 fms. from surface; if so, considering the continued favourable indications, and the stratum being of so highly mineralised a description, as well as of such a congenial nature, there can be little doubt but that we shall have a rich lode at the shaft, or near it. Every effort is being put forth to get it down as quickly as possible, and the future of the mine is altogether cheering.

NEW TRELEIGH.—S. Michell, April 25: The lode in the 60, driving towards the new shaft, is well defined, and will at present turn out nearly 2 tons of ore per fm.; judging from the character of the ground, I am inclined to think that the slides that have so much interfered with the lode in the level nearer the cross-course will disappear. The branch of ore in the new shaft, sinking below the 40, is much the same as that in the 60; the water is very strong in the bottom of the shaft, indicating that a large and porous lode is close underneath; we shall commence driving at the bottom of the shaft next week, which will be nearly 11 fms. below the 40, and should the lode continue in the ends as it is in the shaft we shall soon open up some good ore ground, that can be taken away to good advantage. There is no change in other parts of the mine to notice. The engine continues to work well, and the new wire-rope that is drawing from the new shaft is answering remarkably well; no delay has occurred since its erection.

NEW WHEAL LOVELL.—J. Priske, April 25: The lode in the engine-shaft, sinking below the 30, is 18 in. wide, worth 36*l.* per fm. for the length of shaft, 12 ft.; sinking by 12 men and eight boys, at 24*l.* per fm. In sinking the last 15 or 20 fathoms the ground has been hard and poor, but at present we have a great change for the better, and the lode has improved from valueless to its present value, and judging from its appearance I have every reason to think we are now at the top of a very rich course of tin.

NORTH CHIVERTON.—Wm. Hancock, April 24: New Engine-shaft: The points that are being operated on in this part of the mine remain much the same as last reported on.—Old Sump-shaft: We have cleared the 70 cross-cut south in through the lodes at this level, and find the former party have driven west on the north lode a great many fathoms. I have to-day been in the western level, and home near to Mew's shaft, and find the backs of the level in places have been taken away; the lode presents a fine appearance, being large, composed of gossan, quartz, blende, copper, mundic, and spots of lead, and the country about it of a good description for making a productive lode; as soon as convenient we intend clearing this level, so as to get into the end, west of Mew's shaft, where, no doubt, from information we shall find a leady lode. The south lode is intersected at this level, and cut through, but not driven on its course; it is 5 ft. wide, composed of quartz, blende, mundic, and lead, a very kindly lode, though at present we cannot put much value on it, but judging from the level above may speedily expect a profitable lode here; set to drive east and west by six men, at 45s. per fm. The lode in the 60 east is 2½ ft. wide, producing 1 ton of ore per fm., and 3 cwts. of lead; the end west is at present suspended, and the men put to sink a winze below this level; lode 2½ ft. wide, producing 1¼ ton of blende per fm., and good stones of lead and copper. No. 1 stope east is improved for lead; others remain much the same. We sell on Monday next (computed) 56 tons of blende.

NORTH DOWNS.—Frances Pryor, John Grenfell, April 24: Setting Report: A cross-cut to drive south, in the 85, by six men, at 6*l.* 10s. per fm., or cut the lode. The 50 cross-cut to drive south of King's shaft, by three men and three boys, at 6*l.* per fathom. The end is letting out water freely, and looks as if we are getting near Good Fortune lode; the character of the ground is very good for mineral. A rise in the back of the 50, on the south lode, by two men, at 8*l.* 5s. per fm., producing saving work, and looks better as it gets up near the elvan course. Bennett's shaft to sink below the 60, by six men and three boys, at 20*l.* per fm. A rise in the back of the 60, east of this shaft, by two men, at 2*l.* 10s. per fm.; this will pay for rising, and will open up some tribute ground. Also seven pitches, to eleven men and four boys, at from 13s. to 13s. 4d. tribute.

NORTH MINERA.—A. W. Thomas, April 25: I am daily expecting to intersect the main lode in the 50, as we are now within a very short distance of it, if it keeps its regular underlie from the level above. There are a good many branches of spar in the end, and we occasionally meet with spots of copper, which I consider a good indication.

NORTH PHŒNIX.—James Seccombe, John Martin, April 20: The 160 to drive west in the killas, on the south side of the lode, by six men, at 14*l.* per fm. There is no change to notice in the ground here. The 140 to drive west, on the south side of the lode, by six men, at 7*l.* 10s. per fm. The killas continues favourable, and contains occasional stones of yellow copper ores. To rise a winze in the back of the 140 west, by two men, at 3*l.* per fm. The wall of the lode here has a very good appearance, and the water issuing from it is strongly charged with copper; and as there is no level immediately over this point, which is 5 fms. behind the end. We consider there are good chances of finding the lode productive.

NORTH SHEPHERDS.—H. Bennetts, April 25: In the 40 end, west of engine-shaft, the lode is 1¼ ft. wide, with a more promising appearance than for some time past, and producing good stones of silver-lead ore; the water still continues to issue with great force from the end, which indicates that we are getting near a larger lode, and probably a more productive one. The lode in the 30 end, west of engine-shaft, is 10 inches wide, and a little improved. We have broken from this end to-day some very good stones of silver-lead ore. In the 20 end, west of Rye's shaft, the lode is of a very promising character, 14 in. wide, and producing good stones of silver-lead ore occasionally. At Rye's shaft we have not yet resumed the sinking, in consequence of not being able to get a full pare of men, but hope to do so in a day or two. The ground is cut, and the penthouse will be fixed by to-morrow, and we hope to resume the sinking of this shaft below the 20 fm. level by the end of this week.

NORTH TRESKERBY.—R. Pryor, J. Tregoning, T. Jenkin, April 26: Our ends and tutwork bargains continue, on the whole, much the same as when reported on for the meeting. We hope to cut in from the north part of the lode in the 110, east of Treaddon's shaft, to the south part in the course of a few days; this will prove to be the main part of the lode, as we have a winze sunk from the level above down to within a few feet of this end, in which we have a good lode of ore. To the east of this split in the level above we had a fine course of ore for 24 fms. in length, and a similar result is expected at this point. Our next sampling will be from 430 to 450 tons.

NORTH WHEAL BASSET.—Wm. Roberts, April 24: I beg to hand you report of this mine for the meeting on the 25th inst.—Main Lode: Grace's engine-shaft is 8 fms. 1 ft. 2 in. under the 122, and is sinking by nine men, at 50*l.* per fm., the ground being somewhat easier than for some time past. In the 122 fm. level, 34 fms. west of Grace's shaft, the lode is 4 ft. wide, of a promising character, and producing stamping work for tin; driving by four men, at 4*l.* 10s. per fm.; in the same level, 5 fms. east of shaft, the lode is 4 ft. wide, worth 4*l.* per fm. for tin, and is promising for further improvement; driving by two men, at 3*l.* per fm. In the 112 fm. level, 62 fms. west, the lode continues 5 ft. wide, all saving work for tin; here our progress has been slow in consequence of the ground being hard and wet for driving; it was refused on setting-day, and has not been set since. The 52 is extended 16 fms. west of the western shaft; in it the lode is 3 ft. wide, worth about 4*l.* per fm. for tin; driving by four men, at 6*l.* per fathom. On this lode there are four men stoping the back of the 112, and four men stoping the back of the 102; the former at 5s. and the latter at 4s. per ton of tinstuff.—South Lode: Four men are stoping the back of the 102 at 5s. 6d. per ton of stuff; these stopes are worth respectively 4*l.*, 5*l.*, and 6*l.* per fm. for tin.—North Lode: In the rise in back of the 52, up 6 ft., the lode is small and unproductive; rising by four men, at 12*l.* per fm.; this is being put up to communicate with a winze sunk 9¼ fms. below the 42, the holing of which is very much wanted for ventilation, &c. The 42 is driven 21 fms. west of cross-cut from Grace's shaft; the lode in the present end is 1 ft. wide, producing nearly 1 ton of ore per fm.; driving by two men, at 3*l.* 5s. per fm. There are also three men working a pitch in bottom of the level at 8s., and two men working the back at 10s. in 1*l.* for copper ore. In the winze sinking under the 32, west of cross-cut, down 5½ fms., the lode is 1 ft. wide, but nothing in it at present to value; sinking by four

will yield the same. Brent's stopes, in back of the 65, east of Toll's winze, will yield 3 tons of copper ore per fm. Tregoning's stopes, and also Geake's, further west, will yield the same. Peardon's stopes will yield 5 tons of copper ore per fathom. In Start's stopes the men are desuing the lode, and Prout's stopes, in bottom of the 50, will yield 4 tons of copper ore per fm. In the 30 east we shall be obliged to drive by the side of the lode for some time before taking it down, in order to fill up the gunnis below.

OLD GUNNISLAKE.—J. Phillips, April 26: We have completed the lift in Michael's shaft to the 51, and the water is in fork 2 ft. under the back of that level. If things continue to progress as well as they do at present we hope to get through it to-morrow. We have completed casing and dividing the shaft to the 31, and shall at once commence clearing this level. We have cut into the lode in the 21 east in different places, and find it is equally as good for tin as in the 21 west. From what I have seen throughout the mine, I have no doubt we shall find the deeper levels quite as good. We have taken down the lode in Parker's shaft; it is 4 ft. wide, composed of beautiful gossan, intermixed with good spots of tin throughout. There is no change in the 31, west of Parker's, and the same remark will apply to the winze sinking in bottom of the 20.

PEDN-AN-DREA.—W. Tregay, J. Thomas, April 21: Sump: The lode in the bottom of this shaft produces stones of tin. The sinking has been much impeded this week in consequence of the breakage of the main-rod of our pumping-engine on Wednesday night last; this has been set right, and the water, which had risen to the 110, got down to the 120, and we expect to fork by Monday morning. The 130 east, on Martin's and engine lodes, is worth 14*l.* per fm. The 130 east, on Skimmer's south lode, is worth 8*l.* per fathom. The 130 west, on Skimmer's south lode, is worth 12*l.* per fathom. The 130 west, on Martin's and Skimmer's lodes, is worth 6*l.* per fm. The 120 east winze, on Skimmer's south lode, is disordered by a horse of granite. The 120 end west, on Martin's and Skimmer's south lode, is worth 12*l.* per fathom. The 100 east, on Skimmer's south lode, is worth 10*l.* per fathom. The 100 east rise, on Skimmer's south lode, is worth 6*l.* per fathom. In the 100 north cross-cut we have intersected Skimmer's south lode, noth from the engine-shaft, but not having yet got through it we cannot tell its value; we expect to drive into it next week. In breaking into the wall we find stones of tin and copper ore.—Cobbler's: The 110 east is worth 5*l.* per fathom. The 110 west is worth 4*l.* per fathom. In the 90, north of the cross-cut, there is nothing of importance intersected since last report. The 90 east, on copper lode, is producing ⅛ ton of copper ore per fathom. The 90 west, on copper lode, is yielding ⅛ ton copper ore per fathom. The 68 east winze is worth 8*l.* per fathom. The 68 east rise is holed to the 55.—Cardozo's: In the 20 west the lode is improving in appearance, and we expect a further improvement in getting off the cross-course. We sold to-day 11 tons 8 cwts. 2 qrs. 12 lbs. of black tin, for 579*l.* 16s.

PENHALE AND LOMAX.—J. Kitto, J. Brown, April 26: We shall commence to lay the foundation of the whim-engine house by to-morrow; one of the boilers is in its place. The masons are getting on well with the boiler-house; we shall put the balance-bob in its right place to day, and are ready to drop the lift below adit. Our pumping-engine will be ready to work by the middle of next month.

PENHALLS.—W. Higgins, J. Nance, April 21: Engine-shaft: There is no change in the 60 fm. level cross-cut south of this shaft, the ground being of the same character as when it passed through the branch. The lode in the 60 fm. level, driving west of north cross-cut, is 18 in. wide, worth 8*l.* per fathom, and in the level driving east 20 in. wide, worth 7*l.* per fathom.—Flat and Cowling's Lodes: In the 50 fm. level west, south of slide, these lodes are 4 ft. wide, producing low-priced stamping work; and in the 50, driving east, 3 ft. wide, worth 12*l.* per fm. The lode in the 50 fm. level, driving west of cross-course, is 3 ft. wide, worth 10*l.* per fathom. The cross-cut south at this point is again being pushed on with all possible speed.—Pink Lode: In the 40 fm. level, driving east of south cross-cut, this lode has further declined in value since passing the cross-head spoken of in a former report; now 3½ ft. wide, worth 9*l.* per fathom.

PRINCE OF WALES.—Jehu Hitchins, J. Gifford, Wm. Gifford, April 24: The engine-shaft is now 3 fms. 2 ft. below the 45, and in full course of working by nine men. The 45 east is now about 9 fms. east of shaft, and driving by six men; the lode is now full 3 ft. wide, producing over 4 tons of copper ore, and looking very well indeed, being in congenial ground, and letting out a quantity of water. The winze below the 30, just over the 45 end, is down about 2½ fms.; sinking by six men by the side of the lode, in ground congenial, worth (say) 6*l.* per fm. The engine-wheel still keeps the water in fork, so as to admit of regular working, and we hope will continue to do so for some time to come. The dressing of the ore is in due progress, and on Friday next we shall have about 45 tons of fair quality to sample, with a pile of dredge ore, which will yield from 6 to 7 tons, left on the floors. In conclusion, we beg to say that we never saw the prospects looking better than now.

PROSPER UNITED.—J. Nicholls, April 24: We have sampled to-day 373 tons of copper ore of about the same quality as last sale. Our tin dressing is going on very well. There is no change to remark on in the mine.

REDMOOR.—T. Taylor, April 24: During the past month we have completed the south engine-shaft to the 52, and at this level we have commenced to drive towards the cross-course, by six men, at 50*s.* per fathom; when reached we shall drive south on its course, but if it is mixed up with the slide we shall cross-cut to the lode a little west of its run. We have also six men driving a cross-cut towards the lode seen in the 49; plat set at 7*l.* per fathom. Considering the easy congenial ground, we may expect something at this level. They are breaking good ore near, as in Florence sett.

ROARING WATER.—H. Thomas, April 24: Gillman's engine-shaft is progressing satisfactorily, and the ground since last reported is much more mineralised—in fact, I never saw a better channel of ground for mineral. The lode in Grady's engine-shaft is producing very rich stones of grey ore, and from present appearances a valuable improvement may be looked for, and that soon. I have no doubt that ere long we shall have a good paying mine. The prospects are really good.

ROSECLIFF AND TOLCARNE.—E. Pryor, Jas. Phillips, April 25: We have this day put six men to make the necessary preparations in order to sink Lindo's engine-shaft below the 30, which will be pushed on with all possible speed to reach the 40. The ground in the 30 cross-cut, north of this shaft, is a little harder for driving, but the men are still making good progress, and have driven from shaft about 12 fms. We have again met with No. 1 lode to the east of the shaft, which is 2 ft. wide, composed of mundic, blende, and spar, with rich lead intermixed, of a most promising character. We hope to be able to open on No. 2 lode in course of a fortnight's time, when we shall be able to raise some lead. All other operations are going on very satisfactorily.

ROSEWALL HILL AND RANSOM UNITED.—R. F. Treweeke, April 25: The 140, east of Ransom, is suspended for awhile, in order to sink a winze from the 130 to the 140 for a footway and ventilation, which will occupy from three to four weeks. The lode in the 120 east is worth 5*l.* per fm. The lode in the 110 east is large and promising, but at present not of much value. The lode in the 100 has much improved both in size and value the last few feet driving, now 2 ft. wide, worth from 30*l.* to 35*l.* per fm. The lode in the 90 is worth 6*l.* per fm. The lode in the winze sinking below this level is worth 18*l.* per fm.; we are daily expecting to communicate this winze with the 100. The stopes in the back of this level are worth, on an average, 15*l.* per fm., and in the bottom 20*l.* per fm. We have resumed the driving of the 80 end east, where the lode is at present small and poor. The lode in the 85 is worth 12*l.* per fm. The lode in the stopes in the back of this level is worth 8*l.* per fm.—Engine-Shaft: The sinking of the engine-shaft under the 170 is progressing favourably. The lode in the stopes east of the shaft is worth 20*l.* per fm. The lode in the 170 end east is worth 6*l.* per fm.

ROSEWARNE CONTOLS.—J. Nancarrow, April 24: There has no lode been broken in Ellen's shaft, nor in the 90, east of Ellen's, since last report. The lode in the 80 east is worth 6*l.* per fathom; the north part yields ore to save, and looks promising. The 70 east, on the north part of the lode, is worth 5*l.* per fm. The west stope, in the back of the 70, is nearly worked out. The east stope is worth 6*l.* per fm. The 20 cross-cut has not yet reached the south part of the lode. The lode in the 80, west of the sump, looks more promising; the two parts have come together. The lode in the 40, west of sump, is rather small. The pitches present just the same appearance as they did at the setting.

ROSEWARNE UNITED.—T. Richards and Son, W. Temby, April 26: The engine-shaft is being cased from the 70 to the 80 fm. level. The 80 end is driven west of shaft 9 feet, on a lode 12 in. wide. The 70 is driven west of engine-shaft 35 fms.; lode worth 17*l.* per fm. The 60 is driving west of engine-shaft, where the lode has fallen off in value; this has been an excellent level for 50 fms. long. The boundary shaft is sunk 6 fms. below the 50, on the middle lode. The 60 end is driving north from Noble's winze towards the boundary shaft; there is about 6½ fms. cross-cut, by calculation, from the engine lode to the middle lode at the point before referred to. The boundary winze is sunk in tribute ground from the 50 nearly to the 60. The north lode has been small, but the copper ore unusually rich, which we have broken at and above the 40, but more productive in the levels over. We have been driving the 50 cross-cut north of boundary shaft, where the ground is hard at present, but we are desirous of seeing the north lode in this level, and it is likely we have 6 fms. further to drive. In the winze sinking below the 40, on the middle lode, we have holed to tributers' workings, and there is about 2 fms. further to sink to the 50; this winze has been sunk on tribute lode all the depth. We have long expected to cut the engine lode in the 20, north of Hender's shaft, but the hardness of the ground (13*l.* per fathom) has deterred our progress, although there are now employed six men in this cross-cut. After cutting the engine lode we shall know better how to proceed in the deeper levels, east of engine-shaft. The 30 is driven to within 13 fms. of Hender's shaft, on the south lode, which is unproductive. The 20 end is driven east of Hender's shaft nearly 28 fathoms, in a kindly lode for mineral. The pitches in working are not so good as usual.

SHROPSHIRE (Shrewsbury).—J. Kitto, April 23: Since my last report all operations, underground and at surface, have steadily, and, on the whole, satisfactorily progressed. The main shaft, intended for the engine, is cut down and completed to the adit level, and will now be proceeded with below. The lode in the shaft is 2½ ft. wide, and yielding some good stones of copper. The trial shaft, on the new lode, has been sunk 6 fms., but so far has not been attended with any great success; we are now driving at the bottom of it towards the junction of the two lodes, where we expect an improvement. Some other trials are being made on other lodes which look exceedingly promising, and I have no doubt will result satisfactorily. The winze sinking below the adit, on the east and west lode, west of the cross-cut, is looking very well; lode about 3 ft. wide, and worth at least 2 tons of rich copper ore per fathom; the prospects at this point were never better than at the present moment. We have cleared up and resumed the sinking of another winze east of the cross-cut on the same lode, which is also yielding some nice copper. The walls of the smithey and carpenters shop are nearly up to their required height, and the changing house, store-room, and office are covered in, and in a few days the whole will be finished, when no time will be lost in commencing with the erection of engine, crusher, &c.

SILVER VEIN.—J. Seccombe, E. Burn, April 27: During the past month the engine-shaft has been sunk 3 fms., making its present depth 7 fms. 4 ft. below the 50; during the early part of the month the ground was hard, but it is now much easier, and we calculate that the rate of sinking will be higher. The lode has a very promising appearance, and yields very good stones of ore in places. The machinery works well.

SORTRIDGE CONSOLS.—R. Jackson, April 26: Hitchins's engine-shaft is in a regular course of sinking below the 110, and good progress has been made. In the 110, west of the engine-shaft, the lode is 2 ft. wide, composed of spar, capel, mundic, and good stones of copper ore. In the 110, east of the engine-shaft, the lode is 1½ foot wide, composed of spar, flookan, white iron, and spots of copper ore. In Rowe's rise, in the back of the 98, the lode is 2 feet wide, yielding some good saving work. In the 50, west of the engine-shaft, on the south part of the main lode, the lode is 1 foot wide, composed of spar, mundic, capel, and a little ore. There is no change to notice in any other part of the mine.

SOUTH CALLINGTON.—Wm. Spargo, April 26: The ground in the new shaft is much the same as when last reported on. We have this day broken some splendid stones of lead from the branch we discovered in the shaft on Saturday last, and it is improving as it goes deeper.

SOUTH CONDURROW.—J. Vivian and Son, Wm. Williams, April 21: The engine-shaft sumpmen are cutting plat for bob, &c., at King's shaft, and preparing for putting in the rods, &c., in the 40 cross-cut from the engine to King's shaft. In the 40 cross-cut, north from engine-shaft, the rock is still hard, but the distance to the engine lode is now only 3 or 4 ft.—Middle Lode: In the 30, east of engine-shaft cross-cut, the lode is smaller than it has been, and at present unproductive. In the 20 east the lode is also smaller than it has been, and contains less copper and tin. In the 10 east the lode is 2 ft. wide, and producing tin, worth about 5*l.* per fm. The stopes on this lode are much the same as they have been.—West Basset Lode: King's shaft is now 8 fathoms below the 40, where the lode is large, and of a most promising character, yielding good stones of black and grey copper ore, and containing a great deal of native copper. In the 40 west the lode is composed principally of soft prian and quartz, with occasional stones of black and grey copper ore scattered throughout it; its appearance at present indicates an early improvement. In the 30 west the lode has increased in size, being now 3½ ft. wide, and has at the same time improved; it is now composed of chlorite, soft quartz, and grey and black copper, being worth 7*l.* per fathom. In the 20 west, which is about 4 fms. behind the 30, and just under Vivian's shaft, the lode is 3½ ft. wide, composed of ferruginous quartz, with rich grey copper ore scattered throughout it, being worth about 7*l.* per fm. This end being now under Vivian's shaft, and the said shaft sunk to within 4½ fms. of it, we have to-day set the endmen to rise to communicate with the shaft at 4*l.* per fm.; when this is accomplished we shall have a profitable piece of ore ground laid open for stoping in the back, better ventilation and facilities for driving the level, and be in a position to continue the shaft to the 30 and the 40. In the 20, east of King's shaft, the lode is 1 ft. wide, composed principally of prian and quartz, impregnated with native copper. In the deep adit level, west of Vivian's shaft, the lode is 1½ ft. wide, composed principally of prian and quartz. We have timbered and secured Old Tye shaft (the shaft east of King's) to the adit level, and have to-day set it to sink from the said level to the 10, by two men and two boys, at 1*l.* 10*s.* per fm.

SOUTH DARREN.—J. Boundy, April 21: The lode in the 70 west is producing a little lead and copper ore, and promising an improvement. The lode in the 60 west is 2 ft. wide, composed of a good mineralised killas, copper, and lead ore, worth 14*l.* per fathom. There is no particular change in the character of the lode in the 50 west since last reported on. In the 30 west, driving on the south part of the lode, which is 18 in. wide, it is producing a good mixture of lead and copper ore, and to all appearance likely to improve soon. Other places are without much change to notice. Everything at surface is going on as usual.

SOUTH DOLCOATH.—Wm. Roberts, April 25: The lode in the 56 east is 1 ft. wide, producing 1 ton of ore per fm. In the 46 west the lode is 1½ ft. wide, producing 1 ton of ore per fm. In other bargains no change to notice.

SOUTH WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, April 24: The lode in the engine-shaft is from 10 to 15 in. in width, of quartz and prian, with a little gossan; the granite between the elvan and lode is wearing out, and in a little further sinking the lode will apparently be entirely in the elvan, which may be regarded as a favourable sign. The lode in the adit west is split into two branches, each of which is letting out pretty much water.

SOUTH WHEAL TOLGUS.—April 25: Youren's Lode: The lode in Michell's engine-shaft, sinking below the 164, is getting larger, being now 2 feet wide, consisting of spar, peach, mundic, blende, and stones of ore, a strong lode, but does not contain quite so much ore as when last reported. The lode in the 164 west is 16 in. wide, and is promising in appearance. The lode in the 150 west is 20 in. wide, producing 1 ton of ore per fathom, a kindly lode. In the 130 west the lode is 18 in. wide, composed of spar, peach, mundic, and stones of ore. The lode in the 120 west is 20 in. wide, and is worth for tin 8*l.* per fm., a promising lode.—South Lode: In the 150 east the lode is 3 feet wide, producing stones of ore. The lode in the 140 east is 2½ ft. wide, composed of mundic, spar, peach, and stones of good copper ore and tin. The lode in the rise over the 130 east has not been taken down since last reported. In the cross-cut south in the 130, we have cut another branch 18 in. wide, composed of mundic and copper ore; we believe this is the main, or south part of the lode, and have this day put the men to open east upon it. The lode in the 120 east, on the south part of the lode, has not been taken down since last reported. In the winze sinking below the 120 east the lode is 3 feet wide, producing 1 ton of ore per fm, In the 110, north and south on the cross-course, the ground is easy. The lode in the 90 west is 16 in. wide, consisting of soft spar, blende, mundic, white iron, and spots of ore, a kindly lode.

ST. DAY UNITED.—J. Cock, J. Gilbert, April 21: We have forked the water to the bottom of the mine, and have this day set Oppie's shaft to sink below the 194, at 40*l.* per fm., in a lode worth about 20*l.* per fm.; also the 194, east and west of the same shaft. The 154, west of Billing's shaft, is very much improved; the lode at present is 5 ft. wide, and worth 25*l.* per fm. No alteration in any other bargain. Our pay and setting went off satisfactorily.

ST. IVES WHEAL ALLEN.—J. Nancarrow, J. Daniel, April 25: Roderick's shaft-men have got down rods, and fixed the lift at the 50, which is now working well, and the men are in full course of sinking. The tin continues in the 50 east; the lode is worth 5*l.* per fm. The lode in the 40 east is rather small, but is worth 4*l.* per fathom. The stope below the 40 west is worth 5*l.* per fm. We are clearing upon the south lode below the adit, and expect to see the bottom by the end of this week. There is no alteration to report in the pitches.

ST. JUST CONSOLS.—J. Carthew, W. Williams, April 24: We hope by the end of next month to have the shaft down to the 20, when, of course, we shall commence extending that level, and should the lode in the winze which we are sinking below the 10, and 7 fms. east of the shaft, continue as at present, we shall open up a good piece of tin ground, and the mine will most likely do well.

TRELYON CONSOLS.—R. James, E. Pooley, April 26: We have a little improvement in the 70, west of the new shaft, the lode at present is producing some rich stones of tin. All other points are without change.

TRENCROM.—W. Arthur, W. Rosewarne, April 26: The rise above the 110, east of Hollow's shaft, is holed to the winze sinking below the 100, and has laid open a good piece of tribute ground. The lode in the 110, east of Hollow's shaft, is 16 in. wide, worth 4*l.* per fm. The lode in the 100, east of Hollow's shaft, is 14 in. wide, worth 4*l.* per fm. The lode in the 90, east of Hollow's shaft, is 2½ ft. wide, yielding a little tin. The lode in the 80, east of Hollow's shaft, is 15 in. wide, worth 3*l.* per fathom. The lode in the 70 fm. level rise, against Dawe's shaft, is 12 in. wide, producing saving work for tin. We are making good progress in putting in the skip-road at Dawe's shaft.

TREVENEN AND TREMENHEERE.—J. Medlyn, C. George, April 25: We are glad to say there is good progress making in sinking the shaft below the 187; although the produce of the said shaft is at present low, there are indications of improvement in the course of a few fathoms sinking. We have driven on the course of tin about 17 fms., and the end is still worth 12*l.* per fm. No. 1 stope, in this back, is worth 12*l.* per fm., and No. 2 is worth 8*l.* per fm. The stope in back of the 182, east of Trevenen shaft, is worth 9*l.* per fm. The 150, east of old sump-shaft, has improved, as anticipated in a previous report; the end is now worth 10*l.* per fm. We set to twelve tributers, at an average of 10*s.* 9*d.* in 1*l.* We have suspended the 130 cross-cut, having driven 70 fms. without any success.

TREVENEN AND TREMENHEERE.—J. Medlyn, C. George, April 25: Our setting of Saturday runs thus:—To sink Trevenen shaft below the 187 by twelve men, at 18*l.* per fathom; the lode yields a little tin, and worth 7*l.* per fathom. We expect the productive lode we have about 3 fms. east of shaft will come into the shaft in about 3 fms. sinking. To drive the 187 east by four men, at 4*l.* 4*s.* per fm.; the lode is worth 12*l.* per fathom. No. 1 stope, in the back, by two men, at 40*s.* per fm.; worth 12*l.* per fm. No. 2 stope by two men, at 30*s.* per fm.; worth 10*l.* per fm. A stope in the back of the 182, east of the shaft, by two men, at 45*s.* per fm.; worth 9*l.* per fm. To drive the 150 end, east of old sump, by six men, at 5*l.* per fm.; the new lode cut here is worth 10*l.* per fathom. We shall drive 6 ft. only by the side of the lode for the present, when we shall take down the lode which we shall have stripped before we can be determined how to proceed with it; it looks as if this lode is standing by the side of the old and new workings for scores of fathoms long and high. We also set the twelve tributers at 10*s.* 9*d.* in 1*l.* The dressing operations are going on favourably, and all the machinery is in good course of working.

VIGRA AND CLOGAU.—J. Remfry, April 26: Since my last report we have found a nice specimen of visible gold in the stope in the bottom of the 5, No. 1 shaft, No. 2 mine; the lode is now 5 ft. wide, yielding good-looking quartz. The water has decreased considerably within the last few days, thus enabling us to push on the drivings, and stope with much greater speed. The lode in the east and west levels from No. 3 shaft is without change. In the end of the eastern level from No. 2 shaft the lode is over 6 ft. wide, well mineralised throughout. In the two stopes above the lower adit, No. 1 mine, the lode has slightly improved since my last. The weather has been very dry, and since Monday last we have scarcely been able to keep four heads at work. We have commenced cleaning out the coffers, now idle, which is being worked in the Brittens.

WEST BASSET.—W. Roberts, April 25: North Lode: In the 154, driving west of Thomas's shaft, the lode is 2 ft. wide, producing occasional stones of ore. In the 134, west of Percy's shaft, the lode is 2½ ft. wide, producing stones of good ore.—Engine Lode: In the 144 east the lode is 2½ ft. wide, producing 1 ton of ore per fm. In the 134 east the lode is small. In the 124 west the lode is 2½ ft. wide, of a very promising character, and occasionally producing stones of ore.—Middle Lode: In the 65 east the lode is 1½ ft. wide, composed of gossan and stones of good ore. The lode in the winze below the 65 is 2 ft. wide, yielding stones of ore, and is promising for an improvement. In the 52 east the lode is 2 ft. wide, producing a little tin, and occasional stones of copper ore. In the winze sinking under the 52, west of cross-cut, the lode is 1 ft. wide, producing nearly 1 ton of ore—tribute ground. We have sampled this morning (computed) 176 tons of ore.

WEST BEAM.—Wm. Hosking, April 26: The men have completed cutting through the lode at the 48, west of Brothers engine-shaft, where, though somewhat disordered, it shows a strong masterly appearance, being quite 8 ft. wide, and bearing small quantities of tin throughout. We have, however, suspended this point for the present, and removed the men to other and more productive places. The cross-cut driving south of Brothers shaft at the adit level is being fairly progressed with, through the ground has become a little stiffer, and in order to facilitate its extension towards the lode we have put two more men in it. At the Union Mine we are making good progress in extending the 37, east and west of Union shaft, and I am pleased to find the western end showing a much improved appearance, the lode having increased from 1 to 3 ft. wide, and producing a little tin. One of our stopes in the back of the 27, west of Union shaft, has much improved; the others, together with the tribute pitches, show no change since my last report. We are now very busy on the dressing-floors, and shall send our parcel of tin to market on Saturday next.

WEST CWM ERFIN.—April 25: The lode at the adit level, going east of engine-shaft, is 3½ ft. wide, not so good as it has been for some time past, being rather disordered by a soft joint, now containing blende and clay-slate, with strings of lead ore, but not to value. Nothing of any moment has yet been met with in the cross-cut. The lode in the 14, going east of engine-shaft, is a strong and hard lode, showing good spots of lead ore. The lode at the same level, going west of shaft, is 4 ft. wide, and looking promising, producing good stones of lead ore at times; these points are being pushed with full dispatch, and good progress being made.

WEST GREAT WORK.—S. J. Read, April 25: No. 2 lode in the 36, west from the cross-cut, is 1 foot wide, yielding tinstuff for the stamps. This drivage should be continued to the great cross-course, about 15 fathoms in advance of the present end, when an improvement in the lode may be expected. The flat-rod shaft, on the great north lode, has been sunk to the 20, and a plat cut, and the ends driven 11 fathoms on the course of the lode, where on an average the lode has been worth 7*l.* to 8*l.* per fathom, with indications of improvement. This lode in the 8 west has considerably improved, now 20 inches wide, composed of beautiful gossan, mundic, and quartz, and worth 10*l.* per fathom for tin. The lode in the winze sinking below this level is worth 7*l.* per fathom. The stopes and pitches continue to yield fair quality tinstuff.

WEST SHARP TOR.—Wm. Richards, April 23: The part of the lode now being cut into in the 150 cross-cut contains capel, quartz, iron, and a little rich quality copper ore. We have passed through an oblique branch of quartz and granite, resembling a small cross-course in No. 5 cross-cut in the 162 west during the past week; the part of the lode on the north-west of which is chiefly quartz and iron, containing some rich copper ore. I am glad to say the lode in the highest point yet reached in the back of the 162 is improved; it is now worth 27*l.* per fm. The part of the lode being carried in the 174, east and west of the cross-cut, contains iron, quartz, capel, a little mundic, and some rich grey copper ore. We have not cut through the capel part of the lode in the 174 west yet; it is strongly mineralised with prian, mundic, and some rich copper ore between the joints. The machinery continues to work well.

WEST WHEAL TOLGUS.—April 25: South Lode: Taylor's sumpmen have not completed the work as we expected, preparatory to sinking Taylor's engine-shaft below the 85; the ground took longer to cut through than we calculated; we hope by the end of this week to make a finish, and to commence sinking next week. In the 85 west there has scarcely anything been done, the men from that level have been assisting the sumpmen. In the 85 east the part of the lode that is being carried (4 feet) is producing 3 tons of ore per fm., a good lode. The lode in the 75 east is 4 feet wide, producing 3 tons of ore per fm., and is promising for improvement; lode 4 feet wide. The four stopes over the back of the 75 are each producing 3 tons of ore per fm. The lode in the 65 west is 4 feet wide, producing 3 tons of ore per fm., and the stope over the back of the 65 west, is producing 3 tons of ore per fm. The lode in rise over the back of the 65 west is 15 or 16 in. wide, unproductive. The same remark will apply to the 50 fm. level west. The lode in the winze sinking below the 65 west is 4 feet wide, producing 3 tons of ore per fm.

WEST WHEAL VOR.—J. Southey, April 24: In the 42, driving east of Gundry's engine-shaft, the lode is 3 ft. wide, composed of spar, prian, mundic, and occasional good stones of tin. In the 32 east the part of the lode driving on is 4 ft. wide, producing a little tin, but not enough to value. No alteration in the same level west since last reported. Gutierrez's shaft, sinking below the 20, is now down 8½ fathoms, the ground being still favourable, and good progress making.

WHEAL AGAR.—Wm. Roberts, April 25: The lode in the 110, west of Windstow shaft, is 2 ft. wide, yielding saving work for tin; in the same level east the lode is 3 ft. wide, at present unproductive.—Western Shaft: In the 110 east the lode is 1½ ft. wide, producing saving work for tin. The lode in the 100 east is nearly 2 ft. wide, but chiefly flookan. In the 90 east the lode is 3 ft. wide, producing good work for tin. The lode in the winze sinking under the 70, east of shaft, is 3½ ft. wide, all saving work for tin. The sinking of the old whim-shaft below the 140 is progressing favourably. In the winze below the 130, east of shaft, the lode is 2 ft. wide, producing good stones of ore—a very promising lode.

WHEAL BULLER.—James Inch, April 25: Friday last being our setting-day, we set the following bargains:—26 pitches to 79 men, at an average tribute of 8*s.* 2½*d.* in 1*l.*—Tutwork Bargains: The 80 to drive west, on the north tin lode, to six men, at 13*l.* per fm.; worth for tin 7*l.* per fm. The 70 to drive east, to two men, at 9*l.* per fathom; worth 5*l.* per fm. The 70 to drive west, to four men, at 9*l.* per fm.; worth 12*l.* per fathom. The 60 to drive west, to four men, at 10*l.* 10*s.* per fm.; worth 20*l.* per fathom. A new winze to sink under this level, 15 fms. west of the former winze, to four men, at 10*l.* per fm.; worth 20*l.* per fm. The 50 to drive west, to two men, at 8*l.* 10*s.* per fm.; the lode at this point is producing tin and copper ore, and opening tribute ground. Stevens's shaft to sink under the 80, to four men, at 8*l.* 10*s.* per fm. A winze to sink under the 50, east of this shaft, to four men, at 8*l.* per fm.; worth 12*l.* per fm. The 80 to drive east of Kistle's shaft, to four men, at 3*l.* 10*s.* per fm.; the lode at this point is producing stones of mundic and copper ore, but not to value. The 40 to drive east of Hocking's shaft, on the south part of the Buller lode, to two men, at 9*l.* per fathom; worth 5*l.* per fm. No. 1 winze, sinking under the 28, to four men, at 10*s.* in 1*l.*; worth for tin and copper ore 15*l.* per fm. No. 2 winze, sinking under this level, to four men, at 10*l.* per fm., and 6*s.* in 1*l.* tribute; worth 20*l.* per fm.

WHEAL CREBOR.—J. Gifford, April 24: Cock's shaft, sinking by the side of the lode, is down 8 fms. below the 108. In the 108 east we have set to cross-cut the lode 6 ft. stent, or cut through the lode, by six men, at 10*l.* per fm.; when it was last cut through, about 7 fathoms behind the end, it was 12 ft. wide, 5 ft. of the part yielding 1½ tons of copper ore per fm. In Benny's pitch, in bottom of the 96, directly over the 108 present end, the lode is 5 ft. wide, yielding 4 tons of copper ore per fm., worth 16*l.* The cross-cut south in the 96 west is set to four men, stent the month, at 6*l.* per fm. In the 96 east we have not communicated the rise with the 84, but hope to some time this week, when we shall commence driving the end. The rise in the back of the 84 west, by the side of the lode, is set to four men, at 4*l.* 5*s.* per fathom, stent to hole. Evan's pitch, in the 90 west, by two men, at 13*s.* in 1*l.* R. Davis's pitch, in the 84 west, by two men, at 12*s.* in 1*l.* J. Gilbert's pitch, in back of the 72 east, by two men, at 13*s.* 6*d.* in 1*l.*

WHEAL EDWARD.—G. Rowe, April 21: The lode in the 61 west is improving in size, and yielding an increased quantity of ore, with a very kindly appearance. The tribute department is without change.

WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, April 21: This week the men have been engaged clearing stuff from the 120, and we hope next week to resume the driving of that level. The lode in the stopes above the 110 are looking much the same as we stated last week, worth on an average 5*l.* 10*s.* per fm. In the 100 east the lode is 1 ft. wide, of quartz, &c.; the ground is getting more wet, and altogether we like the appearance of the end much better; it is partaking of much the same character as the lode did in the 90 just before meeting with the tin. The lode in the stope below this level is worth 7*l.* per fm. The lode in the stope above this level is worth 8*l.* per fm. The lode in the 90 east is 2 ft. wide, and producing tinny work, worth 7*l.* per fm. The lode in the rise above this level is worth 10*l.* per fm. The lode in the stope above this level is worth 8*l.* per fm. We have two stopes working to the west of shaft, where the lode is worth 5*l.* per fm. The lode in the 80 east is 2 ft. wide, and yielding a little tin, but not enough to value. The lode in the stopes above this level is worth 10*l.* and 7*l.* per fathom. The lode in the 80 west is 2 ft. wide, and improving, producing tinny work. The lode in the 66 east is 3 ft. wide, worth 9*l.* per fm. Two stopes above this level are worth 9*l.* and 7*l.* per fm.

WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, April 26: We are forcing on the 90 cross-cut as vigorously as we can towards the caunter; the ground is of a white granite. All the other places are the same as last reported.

WHEAL HARTLEY.—P. Skewis, April 25: In the engine-shaft, which is now down 6 ft. below the 52, the part of the lode on which we are sinking is 6 ft. wide, composed of quartz and peach, with good spots of yellow copper throughout; the ore part of the lode is standing north, but we expect to meet with it in the shaft in 2 or 3 fms. further sinking, when judging from its appearance in bottom of the 52 we may expect a good course of ore. The 52 is driven east of shaft, on north part of the lode 3 fms., which is 3 ft. wide, composed of quartz, mundic, and copper ore; in the bottom of this level there is a branch of ore from 8 to 12 in. wide, worth 15*l.* per fm.; the same level is driven west, on the south part of the lode, 2½ fms., which is composed of quartz and peach, with lead and copper ore intermixed throughout. The 40 west is without change.

WHEAL KITTY (St. Agnes).—S. Davey, Wm. Polkinghorne, April 21: In the 82, driving west of Holgate's shaft, the lode is much the same as for some time past, worth for tin 4*l.* per fm. There is no change to notice in the 82 cross-cut north.—Pryor's Lode: In the 65, driving west of new shaft, the lode is 2 ft. wide, and worth for tin 8*l.* per fm. In the 65, east of shaft, the lode is small, and not to value. In the 54, driving west of shaft, the lode is worth for tin 9*l.* per fm. In the 54, driving east of shaft, the lode is 1½ ft. wide, and worth for tin 5*l.* per fm. In the 44, driving west of shaft, the lode is 3 ft. wide, and worth for tin 10*l.* per fm. In the 44, driving east of shaft, the lode is worth for tin 5*l.* per fm. We are pushing on the driving of the 44 and 24 fm. level cross-cuts.

WHEAL KITTY (Lelant).—W. Williams, April 26: The lode in the 140 end, east of Bolitho's rise, is worth 3*l.* per fathom; driving at 3*l.* 5*s.* per fathom. There is no change to notice in the 140 cross-cut, driving south of North Russoe lode. The lode in the winze, sinking below the 130 fm. level, is worth 4*l.* per fathom: sinking at 3*l.* 10*s.* per fathom. The lode in the 120 end is at present small. The lode in the winze, sinking below the 110 fm. level, is worth 4*l.* per fathom. The lode in the 90 end, west of Bolitho's rise, is opening tribute ground. In the 90 end, driving west of cross-cut, on the South Russoe lode, is at present split into two parts, not of much value. The 60 end, on the north part of the Gowan lode, is improved, producing saving work for tin. The rise above the back is worth 7*l.* per fathom. We are pushing on the work at the western boundary shaft, on the South Russoe lode, as fast as possible. The pitches throughout the mine are yielding quite as much tin as usual.

WHEAL MARGERY.—R. James, W. Rogers, April 26: At the American shaft, sinking below the 142, the lode is 2 ft. wide, worth 10*l.* per fathom for tin for length of shaft, 12 ft. No change in the ends since our last report. We sampled on Tuesday last 256 tons (computed) of copper ore, and set our tribute for two months, to 42 men, at tributes from 10*s.* to 13*s.* 4*d.* in 1*l.*

WHEAL MARY ANN.—P. Clymo, J. Harris, J. Stephens, April 26: Clymo's shaft-men are now engaged cutting a trip-plat at the 220. The cross-cut in the 210 is extended 17 fathoms towards the lode. In the 200 north the lode is still small, but producing a little ore; in the same level south it is 3 feet wide, worth 9*l.* per fathom. There is nothing new to notice in the 190 north; in the same level south it is 1½ ft. wide, worth 5*l.* per fathom. In the 180 north it is 3 feet wide, worth 6*l.* per fathom; in the same level south the lode is small, producing a little ore, but not enough to value. The stopes and pitches are producing much as usual.

WHEAL NORRIS.—J. Andrews: Carter's shaftmen are making good progress with sinking and cutting trip-plat below the 70. Good progress is also being made in the 70 east; present rate of driving about 3 fms. per week. In the 57 end, driving east of Carter's shaft, the lode is in rather a disordered state, still producing a little tin, but not enough to value. The lode in the stope in back of the 57, east of rise, is from 18 in. to 2 ft. wide, and worth for tin about 5*l.* per fm. The lode in the eastern stope, in back of the same level, has improved, which for 3 fms. in length is worth 10*l.* per fm.; the remainder of the stope is still coarse. The new lode in the 45 end, driving east of cross-cut, is 2 ft. wide, thickly spotted with mundic and yellow copper ore, and yielding good saving work for tin—a very kindly lode.

WHEAL SPARNON.—W. Tregay, E. Chegwin, April 21: Jardine's shaft has been sunk 4 feet below the 60; the lode here is productive of tin and stones of copper ore, but not having taken it all down we cannot yet report its value—it is a large promising lode, and will all go the stamps as far as seen. This shaft has been set to sink by twelve men, at 40*l.* per fm. In cutting down Jardine's shaft below the 40 we have not yet got down upon the tinny part of the lode, which is a few fathoms below the point reached; set to cut, by six men, at 10*l.* per fathom. In the 60 east we have as yet cleared the level but little beyond the old sump, as the water has hitherto been bringing back much of the sand from eastward, but as we can now creep in many fathoms eastward over the stuff in the level, we do not see what can now prevent our making rapid progress; set to clear by six men, at 15*s.* per fathom.—Old Sump: We have set six men to make good the shaft and skip-road to the 60, or bottom level; this we expect to accomplish in three weeks, so as to be ready for taking away the eastern stuff by the time that level is cleared. The tribute pitches on Pulsford's lode, in the back of the 60, are looking well, especially the pitch west of Jardine's shaft, where the lode is worth fully 20*l.* per fathom. In the 20, east of Jardine's shaft, on new lode, the lode in the rise is improving in appearance, and yielding good stones of copper ore, but not yet through the elvan. We are making good progress in clearing out a foundation for steam-whim, but there is a rather large qu

present lower level. According to all human calculations, the half of it is not yet developed, and yet this is only the first-class ore, which will be taken from the middle shaft only. When we take into account the immense amount of reserved ore in that and the other shafts, and the further developments yet to be made, this must be confessed to be the most remarkable mine in the whole history of copper mining.

ACCIDENTS IN BLASTING PREVENTED.

NON-EXPLOSIVE GUNPOWDER.

In last week's Journal allusion was made to a company in course of formation—The Ehrhardt's Patent Gunpowder Company,—and the particulars of the invention, which will be of much interest to the readers of the Journal who are connected with mines and miners, are subjoined:—

1. The powder is composed of two compound ingredients, which are kept separate until required for use, and are, before being mixed, perfectly inexplosive, and, therefore, free from the dangers attending the use of all other gunpowders, gun-cotton, &c., used for blasting. The two ingredients are very easily mixed, no perfect amalgamation being necessary, so that the two parts can be kept in separate barrels until required, and a sufficient quantity mixed for each day's use.

2. Even when mixed the powder will not explode with any great force, one of the essentials to complete combustion being the exclusion of atmospheric air. When, however, this is effected by tamping, one-half of the patent powder will do as much as a full charge of the ordinary blasting powder.

3. The powder is very little affected by dampness, for being impalpable, a leaky barrel of it might be placed under water for some time without the water penetrating into the interior of the contents; this the inventor has practically proved by using water tamping instead of the ordinary hard tamping. He has illustrated this most successfully in a great number of mines and quarries throughout the United Kingdom. He charges the hole with the powder, the fuse below the charge as usual, then places a little wet tow or grass upon the powder, fills the hole up with water, and then explodes it in the ordinary way, thus avoiding the dangers of hard tamping, and saving a great deal of time as well.

4. The new patent gunpowder will cost less to manufacture than the ordinary blasting powder now in use. Perhaps the greatest advantage which the patent powder has over the ordinary powder is the almost entire absence of smoke. In all the trials which have been made, the miners have shown a keen appreciation of this great boon to them, and they have "One and All" wished to use it in preference to the ordinary powder after they have tried it themselves. The reason, however, is very simply explained as follows:—Places that the miner cannot approach for from 30 to 60 minutes after a charge of the ordinary blasting has been exploded (the air being rendered too impure by reason of the dense sulphurous smoke emitted), can be approached at once, without any inconvenience, after the explosion of the new patent gunpowder, because if the air in the end is foul, and overcharged with carbonic acid gas, the gases generated by the combustion of the patent powder would effectively restore the equilibrium of the atmosphere, the chlorine would purify the air, and counteract the action of the carbonic acid gas and the nitrous oxide gas evolved allows the miner a pleasant and easy respiration. Trial of this was made in a certain level in the Devon Great Consols Mine, where, after firing *two* holes with the ordinary blasting-powder, the men had to wait 20 minutes for the smoke to get sufficiently cleared to enable them to resume working. After *five* holes had been fired with the new powder, the men were able to breathe with comfort, and resume their work immediately after the explosions. It need hardly be stated of what importance such powder would be in driving the Mont Cenis and other tunnels, where so many lives have been sacrificed, through the ill effects of ordinary powder smoke and bad ventilation. The invention will be hailed with welcome by all those who are interested in the comfort and health of the miner, and who are acquainted with the fearful mortality arising from impure air and powder smoke. It is calculated that the mines under the management of Messrs. John Taylor and Sons consume sufficient gunpowder to keep the new company well employed; and this eminent firm of mining engineers have already had the powder tried in a great number of their mines, with a view to its adoption, on account of the comfort which its use will confer upon the miner, as well as the economy which will follow to those mines that use it.

COAL AND COAL FORMATIONS.

In referring to Mr. David Page's admirable little volume, "Geology for General Readers," the consideration of the chapter on Coal and Coal Formations was specially reserved. Mr. Page very truly observes that there is no mineral in the crust of the earth more essential to modern civilisation than coal, and there is, perhaps, no geological technicality more frequently made use of than coal formation, and yet how few have a rational or intelligent conception of either. It is true that men of science have their differences about these as about many other matters; but these differences are, for the most part, trivial, and do not affect the general belief either as to the nature of coal or the processes by which it was aggregated, and Mr. Page then proceeds to exhibit the points upon which geologists are generally agreed, rather than to distract the non-scientific reader with the minutiæ upon which some of them still continue to differ. He observes—What is coal? Is a question more satisfactorily answered by a little round-about explanation than by a direct reply. To say that coal is altered and mineralised vegetable matter is true; but the definition is too curt to be readily intelligible. Everyone knows something of peat and peat mosses, and this peat is simply coal in its first stage of development. When the peat moss was submerged, and covered over by deposits of mud, and clay, and sand, it would, in course of time, undergo important chemical changes, and the mass be reduced to a compact coaly substance, known as lignite, or brown coal; still further changes convert them, in the course of ages, into shining stony coals, like those which are now raised so largely from the coal fields of Great Britain. The truth is, coal occurs in the earth's crust in every stage of development, from the peat mosses and swamp-growths, still in process of accumulation on the surface, down through the tertiary brown coals, to the bituminous stone coals of the secondary and primary periods, and from these again, down to the still older non-bituminous anthracites and graphites. All, in fact, have had a similar origin. They are mere vegetable masses, that have undergone different degrees of mineralisation—the recent vegetable, full of volatile matters; the lignites, less so; the bituminous coals, giving off smoke and flame; the anthracites, barely smoking; and the graphites, masses of pure debituminised carbon.

Since coal is thus merely altered and mineralised vegetable matter, and since vegetation must have flourished, more or less, during every period of the earth's history, Mr. Page observes that there must be coals, of some kind or other, in every geological formation: and he maintains that, arranging the formations in chronological order, we have the coals, or rather the coal family, associated with them in something like the following conditions:—

Quaternary	Peats.
Tertiary	Lignites.
Cretaceous	Lignites and coals.
Oolitic	Coals.
New Red Sandstone	Coals.
Carboniferous	Coals and anthracites.
Old Red Sandstone	Coals and anthracites.
Silurian	Anthracites.
Cambrian	Anthracites and graphites.
Laurentian	Graphites.

It is true, he continues, that in the oldest formations we have but a very scanty exhibition of coaly substances, and it is equally true that hitherto the most extensive developments have been found in strata of carboniferous age; but it is, nevertheless, the fact that coal fields of great value occur in the oolitic and cretaceous rocks, and that brown coals are common in almost every tertiary district. He concludes the chapter by observing that, as a nation, we cannot exalt too highly the importance of our coals and coal fields. Our mechanical manufacturing and commercial greatness is intimately bound up with their existence, and whatever tends to disseminate a knowledge of their nature, to develope their resources, or economise their products is worthy of our encouragement and attention. Commercially, we may have no immediate interest in the substances called *coals*, but indirectly every man is more or less indebted to their applications, and it must be a dull or indifferent mind that cannot be induced to take some interest in products to which his country owes so much of her power and greatness, and himself so many of the comforts and amenities he is daily enjoying.

JOINT-STOCK COMPANIES, AND HOW TO FORM THEM.—In the concise little work bearing this title, Mr. Thomas Tapping, who is well known as a barrister who has had considerable experience in connection with public companies, furnishes every information which capitalists and intending vendors are likely to require in connection with the Companies Act, 1862. Not only is the mode of forming a company carefully and lucidly explained, but ample information is likewise given as to the system of management and administration that should be pursued after they are formed. Whilst carefully avoiding the uninteresting technical style usually met with in legal works, even when intended for non-professional readers, Mr. Tapping has been studious to omit nothing essential to the perfect comprehension of the law; he teaches the law without the legal technicalities. The work may be obtained through all booksellers for 1s., or by post direct from the *Mining Journal* office, 26, Fleet-street, London, for 13 postage stamps

COMPOSITE IRON AND WOOD SHIP PATENT—JORDAN V. MOORE.—This case, which has reference to an infringement of the patent for composite iron and wood ships, having a complete frame of iron, for the support of the external wood planking forming the sides of the vessel, was the subject of an application to the Court of Common Pleas *in Banco*, to obtain a new trial, or set aside the verdict given in favour of the patentee on the trial of the case last term (reported in the *Mining Journal*). Mr. Grove addressed the Court on behalf of the patentee, contending that the verdict was perfectly sound, and that this patent was one for an invention for such a change in the mode of constructing ships as had been proved to be decidedly novel, and could be the subject of valid letters patent, as, although several witnesses had stated at the trial that previous to the date of this patent iron ribs or supports had been adopted, in conjunction with iron plating, instead of outside wooden planking, yet it had not been proved that a complete frame or skeleton ship of iron had been adopted anterior to the date of the patent, and, therefore, the right must be considered to stand as unimpeached, and the verdict ought to remain undisturbed. Mr. Bovill, *contra*, argued that, in order to render the acts of the defendant infringements within the scope of the patent, it was necessary that the patent should in force and effect comprise the use of any and every form of framing or system of supports for the skin of the ship when combined with external wooden planking, because the defendant had not used the particular form and description of framing described in the plaintiff's specification, and, therefore, could not be deemed an infringer of that particular form and description of arrangement, but of the general idea or principle only. He proceeded to show, by reference to the specification, that the patentee had in his first claim set out the invention in the broad and general way, and for that reason his patent was bad, and the verdict ought not to stand, seeing the invention, taken in that extensive form, was not new, the evidence at the trial showing that many different kinds of framings for iron ships had been adopted, for some of which patents had formerly been granted; and that even the adoption of wooden planking, in substitution for iron plating, was no novelty; but Mr. Bovill principally relied upon the point that, according to all the recent cases, particularly the cases of Harwood v. the Great Northern Railway, and Ormson v. Clark, the substitution of one material or thing for another, for a *cognate purpose*, was no *patentable* invention; and that, according to the first and broad claim, the invention consisted simply in the substitution of wooden planking for iron plates, which was bad subject matter for a patent.—The Court adjourned the consideration of the case till yesterday (Friday morning), when Mr. Justice Byles delivered the judgment of the Court, to the effect that the judges—Erle, C. J., Byles, Keating, and Mr. Smith—considered that in this case it was clear that the defendant had not interfered with the particular form and arrangement of the skeleton frame described in the specification, and that hence it became necessary to decide solely as to whether the broad principle of constructing a ship with an *iron framing of any kind*, with external wooden planking, would support a patent; and this broad principle was considered by their lordships to be claimed by the patentee by the first claim in his specification, and that such a claim was really a claim of the application and use of a material for a purpose analogous to that for which such material had been used before the date of the patent—it being the fact that ships had been made with iron framings of various kinds, and with iron external platings; and ships had from time immemorial been made with external wooden planking forming the outside thereof. The verdict must, therefore, be entered for the defendant on all the issues material to the case.

CHONTALES.—The price of these shares is again quoted lower this week, but it is right that the shareholders should be made aware of the cause of this. There has been much speculative buying and selling, and the transactions having been carried over from account to account, the speculative sellers and the "bears" have discovered that a good deal of the purchasing was simply for a rise in price, and not to pay for the shares. They have, therefore, taken advantage of this to keep lowering the price, so that the shares which they originally sold at (say) 3*l*. prem. they may now buy back at 1*l*., thus clearing a gain of 2*l*. It will be seen that these transactions really do not represent *actual shares*, and that they increase the dealable stock of the company in the market, to any extent which the boldness and imagination of speculators may lead them to. Of course, the effect is to induce timid holders, who may be ignorant of the circumstances, to sell their shares, and thus help those who are interested in knocking down the price. Again, parties who sold shares they had not got, have, when call on to deliver, borrowed the shares, and paid for the loan of them. The truth of these statements is proved by the fact that when shares are demanded, the greatest difficulty is experienced in many cases in getting them, however small the number; and lots purchased many weeks ago are only now being delivered, while every inducement is held out to purchasers not to take up, by the offer of 1s. 6d. per share and upwards, to allow the shares to be carried over. A reaction must come before very long, when the reports and remittances of gold from the mines will bring into the market large investors, and then the "'bears' will be caught," and the borrowed shares will have to be returned, in addition to the new purchases. In the meantime let all buyers demand the shares they have bought, and may still buy, and let the holders of shares determine not to assist in depreciating their own property by lending their shares. In a very few months it will be seen that this property will produce results fully confirming all the wonderful statements that have been made respecting it.

ZACATECAS SILVER MINING COMPANY.—An influential company is in course of formation to work this most wonderful property. It has already returned upwards of 2,000,000*l*. worth of silver, with the aid of only machinery worked by horses and mules; and in the last four years about 100,000*l*. per annum has been returned from the stuff at surface, thrown away by the old workers. With efficient machinery the profits are likely to be enormous. There are to be 40,000 shares of 5*l*. each, 10s. to be paid upon application, and 1*l*. on allotment, and already a large number are privately taken, and are being paid on daily. The first 20,000 paid on are to be allotted in full.

MINERAL RIGHTS ASSOCIATION.—The allotment letters were issued on Wednesday, and, we understand, was a very fair one. Though the number of shares applied for was largely beyond those to be allotted, there were no "regrets." The energy shown by the board in having dispatched one of the directors and a well-known mine captain, nearly a fortnight ago, to examine some important properties, is very favourably commented upon.

THE CREDIT FONCIER AND MOBILIER OF ENGLAND.—The third general meeting was held on Wednesday, at which the Governor (the Right Hon. J. Stuart Wortley) presided. It being agreed to take the report (an abstract of which has already appeared in the *Mining Journal*) as read, the Chairman congratulated the company on its present favourable position, and stated that, although he had not to propose so large and remarkable a dividend as on former occasions, he had the pleasure of submitting to the shareholders a dividend of 30 per cent. on their investment. The result of the balance-sheet, and of the profit and loss account, setting aside altogether the 300,000*l*., which was the profit of the operation sanctioned by the last meeting of issuing new shares, which had not been put to profit and loss, and upon which no commission had been taken by anybody, could not but be considered as most satisfactory, showing the gross balance to be no less than 281,829*l*. The bills payable—perhaps the most formidable item in a balance-sheet—were here only 270,000*l*.; and considering that millions were dealt in, that was not a large amount. The cash at the bankers was 322,000*l*. The debentures were still comparatively inconsiderable, amounting to 77,320*l*., but it showed the progress of the company, and was evidence of the fact that it was gaining a solid reputation, as the calumnies against it ceased to have any effect on their property. Having referred to the noteworthy circumstance that—to use the words of the Chairman—"they had not up to this time from the commencement of the company incurred a single bad debt," he concluded by expressing his belief that the time would come when the company would rise above the calumnies that had been cast against it by persons deeply interested in its deterioration, and when by the good conduct and prosperous transaction of its business it would rise from a high commercial company to a national institution. A dividend and bonus, equal to 30 per cent. per annum were declared, which absorbed about one-half of the balance of profit and loss account. The general reserve fund amounts to 500,000*l*., the dividend reserve fund to 150,000*l*., which, with the undivided profits, amounting to 86,606*l*., make a total of 736,606*l*., equal to about 3*l*. 13s. 6d. per share on the whole 200,000 shares, making, with the 5*l*. capital paid, a total intrinsic value of 8*l*. 13s. 6d. per share. A vote of thanks was passed with acclamation to Mr. Albert Grant, M.P., the able manager.

ASSESSMENT ON PUBLIC PROPERTY FOR INCOME TAX.—The assessment of railway property in Great Britain for income tax in 1863-4 showed an increase of 330,000*l*., as compared with 1862-3; the assessment of ironworks in 1863-4 showed an increase of 108,000*l*., as compared with 1862-3; the assessment of mines in 1863-4 showed an increase of 56,000*l*., as compared with 1862-3; and the assessments of gasworks showed an increase of 44,000*l*. in 1863-4, as compared with 1862-3. There was, however, a falling off in the assessment of the Irish railways. The taxation of railway traffic in 1864-5 produced 439,332*l*., as compared with 403,626*l*. in 1863-4. This branch of revenue has been gradually increasing of late years, having amounted in 1862-3 to 383,057*l*.; in 1861-2, to 372,178*l*.; in 1860-1, to 366,288*l*.; in 1859-60, to 359,212*l*.; in 1858-9, to 339,569*l*.; in 1857-8, to 348,611*l*.; in 1856-7, to 334,063*l*.; and in 1855-6, to 323,790*l*. This taxation of railway traffic must not be confounded with the assessment of railway property for income tax; the former is a a kind of working expense paid by the companies in their corporate capacity; the latter is sustained by the share and debenture holders out of their private resources.

MINE ACCIDENTS.—At Drake Walls Mine, on Friday, Thos. Jefford, 60, was caught by the wheel of the grinder, and crushed to death.—On the following day a miner, named Rowe, slipped from the ladders, and knocked off another, named Treloar; the leg of the latter was broken, whilst the former escaped with slight injury.—At Lower Treskerby Mine, Wm. Phillips, 21, fell down a winze, and was killed.

CORNISH TIN MINES.—The Normans are said to have worked the tin mines as far as their limited skill permitted, but it was not very profitable employment, for the revenue derived by King John from his mines only amounted to one hundred marks per annum, of which one-twelfth was paid to the Bishop of Exeter, in lieu of his claim to a tenth of the gross produce by way of tithe. The same sum is now paid, without any alteration, to the same prelate, out of the revenues of the Duchy. About the middle of the 16th century about 800 tons of tin were sent to ground every year. In the reign of Queen Anne the quantity produced annually was about 1800 tons. In 1750 it had got up to 2200 tons; and it is now estimated to reach 5000 tons, and give employment to 20,000 persons immediately connected with tin mines. The sole right of working the tin mines of Cornwall has been from the Conquest in the King or his grantee. So sensible was King John of their importance, that he granted a charter to the tinners, and voluntarily relieved the county from the oppressive forest laws; before that the Barons had extorted from him at Runnymede similar concessions for the rest of the kingdom. In the middle ages the Jews were not only speculative alchymists, but also the only operative chemists. They used to go down to Cornwall, buy tin ore at Marazion, and smelt it there, for which reason the place is now called Market Jew. Richard, King of the Romans, granted a fair to the inhabitants. His grant was confirmed by Queen Elizabeth, who also gave them another fair, so that the town now enjoys a half-yearly fair.—*The Gentleman's Magazine.*

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, APRIL 27, 1866

COPPER.	£	s.	d.	£	s.	d
Best selected....p. ton	94	0	0	—		
Tough cake & tile „	91	0	0	—		
Burra Burra.... „	93	0	0	—		
Copper wire .....p. lb.	0	0	12	—		
ditto tubes ..... „	0	12¾	—			
Sheathing & bolts p. ton	96	0	0	—		
Bottoms ..... „	101	0	0	—		
Old,(Exchange).... „	82	0	0	—		
IRON.	Per Ton.					
Bars Welsh, in London..	7	10	0	8	0	0
Ditto, to arrive	7	10	0	7	12	6
Nail rods	8	7	6	9	5	0
„ Stafford. in London	8	15	0	8	17	6
Bars ditto	8	15	0	10	0	0
Hoops ditto	9	15	0	10	10	0
Sheets, single	10	7	6	11	0	0
Pig No. 1, in Wales....	4	5	0	4	10	0
Refined metal, ditto....	4	0	0	5	0	0
Bars, common, ditto....	6	15	0	7	5	0
Do., merch., Tyne or Tees	7	10	0	—		
Ditto, railway, in Wales	6	10	0	6	15	0
Ditto Swed. in London.	11	10	0	—		
To arrive	11	10	0	—		
Pig, No. 1, in Clyde....	3	19	6	4	8	6
Ditto, f.o.b. Tyne or Tees	2	9	6	—		
Ditto, Nos. 3, 4, f.o.b. do.	2	6	6	2	5	6
Railway chairs.....	5	10	0	5	15	0
„ spikes.....	11	0	0	12	0	0
LEAD.						
English Pig, common..	21	0	0	—		
Ditto, ordinary soft....	21	7	6	21	10	0
Ditto (WB)	22	15	0	—		
Ditto sheet	21	15	0	—		
Ditto red lead	23	10	0	24	0	0
Ditto white	27	0	0	30	0	0
Ditto patent shot.....	23	15	0	24	0	0
Spanish	20	5	0	20	100	

BRASS.	Per lb.
Sheets	10¾d.—
Wire	10¼d.—
Tubes	11½d.—

STEEL.	Per Ton.					
Swedish, in kegs (rolled	13	0	0	14	0	0
„ (hammered).	15	0	0	16	0	0
Ditto in faggots.....	16	0	0	16	10	0
English, Spring	19	0	0	23	0	0
QUICKSILVER (per bottle).	7	0	0	—		

SPELTER.	Per Ton.					
Foreign	23	10	0	—		
To arrive	23	10	0	—		
ZINC.						
In sheets	30	0	0	—		
TIN.						
English, blocks	91	0	0	—		
Ditto, Bars (in barrels)..	92	0	0	—		
Ditto, Refined	94	0	0	—		
Banca	80	10	0	—		
Straits	78	0	0	79	0	0
TIN-PLATES.*						
IC Charcoal, 1st qua. p. bx.	1	15	0	—		
IX Ditto 1st quality „	2	1	0	—		
IC Ditto 2d quality „	1	13	0	—		
IX Ditto 2d quality „	1	19	0	—		
IC Coke ..... „	1	8	0	1	9	6
IX Ditto..... „	1	14	0	1	15	6
Canada plates ....p. ton	18	10	0	—		

In London; 20s. less at the works.

Yellow Metal Sheathing...p. lb.		9d.—
Sheets.....p. lb.		9d.—
Indian Charcoal Pigs } in London ..... }	7	0 0- 7 10 0

* At the works, 1s. to 1s. 6d. per box less.

REMARKS.—The Metal Market during the past week has continued quiet, and there has been a considerable lack of animation in the trade generally, orders being given out only sparingly, and a very small amount of speculative operations taking place. The continued unsettled state of affairs in the United States is very prejudicial to our trade with that country, as it prevents that improvement taking place which it was hoped would arise at the conclusion of the war, especially as some time since the orders from America were coming in very satisfactorily, but of late they have dropped off very considerably, and are now coming in very slowly. Still we are not without hope that we shall see a revival in our trade with America ere long, and that we shall again send them our former usual quantities of metals. The intelligence received during the week from India reports that at Calcutta there was not much doing in metals, and at Bombay the principal feature of the metal market was the extreme firmness displayed by holders; at the same time, however, the dealers were not much disposed to do business, and the consequence was that only a small amount of business had been done. We should much like to see a better state of things arising in our Indian markets, which formerly took so large a quantity of metals during the year.

COPPER.—This metal still remains in a very unsatisfactory condition, and there does not appear any present prospect of recovery. What little business is done is much under fixed rates, and it is difficult to understand how it is that the official prices can be maintained.

IRON.—In Staffordshire the principal ironmasters are fairly supplied with orders, but the second-class makers are not fully employed, and the high price of pig-iron prevents them from attracting orders by making so great a reduction in prices as they ordinarily do from the prices of the leading makers. Contracts for 11,000 tons of rails for New Orleans are being invited, and it is hoped that this may be followed by extensive orders from that part of the United States. In Welsh the trade continues in about the same state as last reported; a few good orders have come to hand on foreign account, and purchasers on home account evince a disinclination to give out more specifications than they are obsolutely obliged to do. Notwithstanding the unfavourable circumstances which at present exist, makers have confidence that before long trade will assume its usual activity at this season. The demand for America continues quiet. There is an improvement in the Canadian trade, and the shipments of railway iron to Mexico and South America are satisfactory. A steady business is being transacted with the continental markets, with a better enquiry. Quotations for pig-iron are firmly maintained. In Swedish iron prices are not quite so firm. In Scotch Pig-Iron the market has continued very strong, and at one period of the week the price went up to 80s. cash, but has since resumed its former price of 79s. 6d. cash, at which it still remains.

LEAD remains very steady, with a good business doing; prices continue at 21*l*. for common English pig, 21*l*. 7s. 6d. to 21*l*. 10s. for LB, and 22*l*. 15s. for WB.

TIN.—The market for foreign has not improved, and prices are somewhat lower than they were last week. Business has been done in Straits of good merchantable quality at 78*l*. cash, and fine at 79*l*. cash. Banca has been sold in warehouse here at 80*l*. 10s. cash. English is obtainable under the official quotations.

SPELTER.—As the probability of peace being maintained between Austria and Prussia becomes greater the price of this metal declines, and the present quotation for parcels on the spot is 23*l*. 10s., but the market remains inactive.

TIN-PLATES.—The demand continues pretty active for charcoals, but not quite so good for other descriptions.

STEEL and QUICKSILVER remain without change.

BIRMINGHAM, APRIL 27.—Rylands' "Iron Trade Circular" says—Markets quiet. No alteration in prices, but anxious sellers of manufactured iron.

There has been scarcely any business in the MINING SHARE MARKET this week, and the quotations we give, few as they are, are nearly all nominal. There is an old saying that "it is never so dark as just before the dawn," and we hope, therefore, when things have come to their worst we shall have a reaction; but at present the public, frightened by the disclosures that have taken place in connection with discount and financial companies, are not buying anything at all, and, consequently, those who are compelled to sell have to take any price they can get. The public in all these matters, seem to avoid the "happy medium," and to rush into extremes, either of excitement or depression. The only mine that has kept firm has been Great Laxey, and the shares leave off 21¾ to 22¼. West Chivertons have declined, owing, we are told, to "bearing" transactions, and as much as 10s. per share has been offered for the loan of shares to deliver; they leave off 67½ to 72½; the lode in the 100 crosscut is worth 80*l*. per fathom, and Valpy's, or the rich part, not yet cut into; the 90, west of Hawkes', is holed to Burgess' shaft; the four winzes sinking below the 90, one 6 fms., another 16 fms., another 28 fms., west of Hawkes', and one east of Hawkes', in Williams's part of the lode, are worth 370*l*. per fathom; a rise in the back of the 70 fm. level, 30 fms. behind the end, is up 7 fms., and worth 25*l*. per fathom. Great North Laxeys, 1¾ to 2; in the shaft the lode continues to improve, it is 6 feet wide, with a rib of lead through it, worth at present full 2 tons of lead ore, and increasing in width; the lead ore at surface is now 30 tons.

Camborne Vean, 12s. to 14s.; Chiverton Moor, 5 to 5¼. Chontales Gold shares have been very largely dealt in all the week; the settlement in them was very heavy on Friday, and it would seem that a heavy "bear" account is still open. They leave off 2¾ to 3¼ (2*l*. paid). Mineral Rights, par to 5s. prem. Clifford Amalgamated have declined to 9, 11; the mines have never got over the "run in the levels" that we commented upon several months ago, when the shares were at 25*l*. each. Our remarks gave great offence at the time, but the result has more than justified them. The low price of copper, also, seriously affects the mines. East Basset, 16 to 18; East Lovell, 8 to 9; Frontino and Bolivia, 25s. to 30s. Wheal Buller, 14 to 16; at the monthly setting, on Friday last, 79 men were put on tribute, at an average of 8s. 2¼d. in 1*l*., and the tutwork bargains are worth in the aggregate 116*l*. per fathom. The 80, east of Kistler's shaft, in which a course of copper has for some time past been looked for, is now producing stones of copper ore, in favourable ground. East Caradon, 7 to 7½; the 80 east is worth 8*l*. per fm.; the 90 east, 18*l*. per fm. West Caradon, 8¼ to 9; the loss on four months' working, according to the accounts presented to the meeting, was 1672*l*. 13s. 5d.; but the prospects at the bottom of the mine are more cheering, especially on Vivian's lode, lately cut; and, should Allen's and Downing's lodes be

found as productive as the agents expect, the mine will soon be in a better position. East Grenville, 2½ to 2¾; the mine is improving at the shaft, which shows signs of ore. Prince of Wales, 4s. to 5s.; the 45 fm. level east has been driven 9 fms.; the lode is still worth over 20*l.* per fathom. The water-wheel is keeping the water in fork, so as to admit of regular working. In addition to the sampling, 6 or 7 tons are left on the floors. North Treskerby, 2⅜ to 2¾; Great Wheal Vor, 22 to 23; Hingston Down, 4⅞ to 4⅝; Marke Valley, 3⅜ to 4; South Condurrow, 34s. to 36s.; Tincroft, 13¼ to 14½; West Wheal Seton, 127½ to 132½; Chiverton, 6 to 6¼; Wheal Seton, 195 to 205. Wheal Grenville, 2 to 2½; the tin sale this month was 18 tons 17 cwts., realising 702*l.* 0s. 2d. At the old price of tin this would have left a good profit. At the mine an important operation—and which would seem to have been too long neglected for the tin—is the cutting of the caunter copper lode, which was never seen after the tin lode was discovered. Before that time the caunter produced 1309 tons of copper in a short time, and it realised 8849*l.*—a great deal of it fetching over 10*l.* per ton. This was rich up to the tin lode, which run across and heaved it.

The disturbing element so seriously affecting every market on the Stock Exchange has this week fallen heavily on that of mines. For two years past the general market for this class of securities has gradually become more circumscribed, till at last it would seem to have culminated. The limited number of substantial securities, such as Devon Great Consols, Great Laxey, West Chiverton, &c., in British mines, are upheld by the intrinsic merits of the respective concerns; and in foreign mines, St. John del Reys are upheld by their prospects and profits. The recently-introduced foreign mines in Nicaragua meet with support from the public, and anticipations bid fair to be realised, and again to resuscitate the market for foreign mine adventures. The dealers, however, so completely discourage investors and speculators, by stamping on the most incipient appearance of vitality, that with these, like the few English mines named, nothing but intrinsic merit, and actual profit, and sound management, can stem the tide of opposition. The price of tin and copper makes much against mines. Lead is commanding a good price, and is a favourable exception to the prevailing gloom, and it is argued that the market for tin and copper cannot well be worse than it has been for some time, and that the shutting up of a number of mines, producing in the aggregate a very large quantity of tin at a loss, must at no distant date bring about a reaction. Great Laxey shares are firm, and command a ready market at 21¼ to 21⅜; a considerable business has been done in these shares. West Chiverton, 70 to 75; the prospects of the mine are unparalleled in Cornish mining. Adverse operators have succeeded in quoting shares lower, in the hope that timid holders may be frightened, and supply the stock wanted. Chontales shares in the early part of the week were firm at 1½ prem., but have been forced down to 1⅛, 1⅜ prem. Mineral Rights shares have been dealt in at ¼ to ⅜ prem.; the floating of this company has proved a great success. Central American, ¼ to ⅜ prem. Cobre in moderate demand at 13⅜ to 14½; St. John del Rey, 53½ to 54¼; Port Phillip, ⅞ to 1; English and Australian Copper, 1 to 1⅛; Anglo-Brazilian, 1-16th dis. to 1-16th prem.; Yorke Peninsula, 3-16th to 5-16th; Yudanamutana, ⅞ to 1⅛; Washoe Gold (all paid), 1⅞ to 2¼ per share. The settlement passed off well on the Stock Exchange.

The DOROTHEA WEST, GREEN, BLUE, AND RED SLATE COMPANY (Limited) have been working their quarry in Carnarvonshire since the beginning of the year, and from the accounts of the working to the end of March, which we have seen, it appears that large and increasing profits have been realised, amounting in three months to upwards of 40 per cent. upon the total cost of working. This bids fair to be one of the most successful of modern slate quarries, the celebrated and valuable green slate being produced in great abundance. These slates may be seen on many of our large metropolitan hotels and public buildings. An abridged prospectus of this company is published in another column of this day's Journal, from which it will be seen that the accounts can be inspected, and this statement, verified at the offices of the company. Slate quarries of such character are among the best permanent investments to be found in this country, and are not of the uncertain or transitory nature of mere mining speculations.

At Redruth Ticketing, on Thursday, 2387 tons of ore were sold, realising 10,261*l.* 15s. The particulars of the sale were:—Average standard, 110*l.* 12s.; average produce, 6⅜; average price per ton, 4*l.* 6s.; quantity of fine copper, 152 tons 2 cwts. The following are the particulars:—

Date.	Tons.	Standard.	Produce.	Price per ton.	Per unit.	Ore copper.
Mar. 28....	2921	£114 10 0	6¼....	£4 8 6	14s. 2d.	£70 12 6
April 5....	3767	116 4 0	6⅜....	4 8 6	14 4	71 11 0
„ 19....	2171	112 0 0	6¾....	4 16 0	14 3	71 5 0
„ 19....	3924	119 0 0	6⅝....	3 18 6	14 0	70 0 0
„ 26....	2387	110 12 0	6⅜....	4 6 0	13 6	67 8 0

Compared with last week's sale, the decline has been in the standard 1*l.* 15s., and in the price per ton of ore about 2s. Compared with the corresponding sale of last month, the decline has been in the standard 3*l.* 6s., and in the price per ton of ore about 4s.

At Hingston Down Consols Mine meeting, on Thursday (Mr. W. A. Thomas in the chair), the accounts for the four months ending February showed a credit balance of 1003*l.* 2s. 8d. A dividend of 1500*l.* (5s. per share) was declared. It was estimated that at the next meeting there will be a credit balance of 1314*l.* 13s. 1d. Capt. T. Richards reported upon the various points of operation. The next sampling, even with the present low standard, will leave some profit.

At North Wheal Basset meeting, on Wednesday (Mr. C. A. Floyer in the chair), the accounts, for Jan. and Feb., showed a debit balance of 500*l.* 13s. 2d. A call of 2s. per share was made. Capt. Roberts reported upon the various points of operation.

At East Carn Brea Mine meeting, on April 20 (Mr. W. A. Thomas in the chair), the accounts, for Jan. and Feb., showed a credit balance of 892*l.* 6s. 7d. Capts. T. Glanville and J. Scholar's report was unfavourable, and it was resolved that their services be dispensed with, the committee to find substitutes forthwith.

At East Wheal Russell quarterly general meeting, on Wednesday (Mr. J. Procter in the chair), a call of 3s. per share was made. Details will be found in another column.

At Great Devon and Bedford (Colcharton) Mine meeting, on April 17, the directors decided to make the sixth and last call, of 2s. 6d. per share, making 24. 10s. per share paid.

At Wheal Emily Henrietta meeting, on Monday, the accounts showed a debit balance of 171*l.* 14s. 9d. A call of 10s. per share was made. The outstanding calls amount to 276*l.* 3s. 9d. Messrs. Michell were appointed surveyors.

At the Wheal Grylls meeting, on Tuesday (Mr. Peter Watson in the chair), the accounts showed a debit balance of 354*l.* 7s. 4d. A call of 10s. per share was made. Details in another column.

At the East Wheal Grylls meeting, on Tuesday (Mr. Peter Watson in the chair), the accounts showed a credit balance of 220*l.* 3s. 1d. Details elsewhere.

At the Great Wheal Grylls meeting, on Tuesday (Mr. Peter Watson in the chair), the accounts showed a credit balance of 54*l.* A call of 2s. per share was made. Details in another column.

At the Lady Bertha Mine meeting yesterday (Mr. Upton in the chair), the accounts showed a debit balance of 900*l.* A call of 3s. per share was made. The committee of management were re-elected. The report of the agent appears among the Mining Correspondence.

At the North Dolcoath Mine meeting yesterday (Mr. A. Bingham in the chair), the accounts showed a debit balance of 816*l.* 5s. 11d. A call of 4s. per share was made. The committee of management were re-elected. The report of the agent appears among the Mining Correspondence.

At the Carmaux Colliery Company (Mines de Carmaux) meeting, on April 10, the accounts showed a profit on the twelve months' working of 375,764¼ frs., out of which 371,200 frs. were distributed as dividend (16 frs. per share), and 4564¼ frs. were carried forward to credit of next account. The report of the Council of Administration states that the confirmation of the sale of the Carmaux to the Railway du Midi is required, and that the statutes of the company must be modified accordingly. The output from the collieries in 1865 was 115,600 tons, or 2600 tons more than in the preceding year. The increase would have been considerably greater but for an inundation of La Grillatié pit, which caused an interruption for three months, during which at least 12,000 tons would have been raised, and resulted in the death of four workmen. Some difficulty has been experienced with regard to labour, most of the men being agriculturists, and consequently leaving work for a season, but measures have been taken, by improving the moral and material position of the workmen, to secure their permanent services. Cheap and healthy cottages, with gardens, have been provided, a free school for boys has been established, the miners' families receive fuel free, a mutual benefit society, which has been successfully at work for several years, provides the sick with doctor, medicine, and money during illness and convalescence, and co-operative stores and a hospital will complete the organisation of the "workmen's city." It is hoped that these advantages will be appreciated by those employed. The company will henceforth be called the Société des Mines de Carmaux, instead of the Compagnie des Mines et Chemin de fer de Carmaux. The auditors, after giving an abstract of the accounts, observe that the results "attest the satisfactory financial position of the society, and the *resumé* which they submit justifies, they think, the entire approbation which your auditors have given to the balance-sheet for 1865."

At the Capula Silver Mining Company, on Wednesday (Mr. Sankey in the chair), the report of the directors was received and adopted. Details elsewhere.

At the Austin Consolidated Silver Mines Company (special) meeting, on Monday (Mr. Lucas in the chair), it was agreed to wind-up the company voluntarily. Details in another column.

At the Australian Mortgage, Land, and Finance Company (Limited) meeting, the available balance was stated at 16,653*l.*, and a dividend was declared for the six months ending December at the rate of 12½ per cent. per annum. It was also decided to carry 9500*l.* to the reserve. A resolution was passed requesting Mr. Gillespie (who was not present) to resign his seat at the board, owing to his recent connection as director with the Joint-Stock Discount Company.

The Scottish Australian Mining Company report is very favourable. The general revenue account of the company for the six months ending at that date shows that, after making all necessary deductions for wear and tear, and depreciation of railway, machinery, rolling stock, &c. (1334*l.* 0s. 10d. having been set aside for that purpose), and setting aside also 500*l.* to create a "casuality reserve fund," and writing off 1000*l.* from the balance of preliminary expenses, and paying all current expenses in the colony and in London, as applicable to that period, there remains an available profit of 5140*l.* From this amount the directors propose a dividend on the capital of the company (12,000*l.*) at the rate of 7½ per cent. per annum, free of income tax, which will require 4575*l.*, and leave a balance of 565*l.* to be carried forward to the credit of the next account. During the period reported on the coal trade of New South Wales was well maintained. The quantity of coal raised and sold from Lambton Colliery during the six months ending Dec. 31, 1865, was 70,771 tons, as against 44,453 tons in the corresponding period of 1864. The nett profit from the colliery (including 315*l.* 9s. 2d. of rent received and profit realised by the sale of allotments in the Lambton township), after writing off the sum of 1834*l.* 8s. 10d. to meet wear and tear, and create a "casuality reserve fund," was 6983*l.* 0s. 3d. The anticipation of Mr. Morehead, the superintendent of the company, that a better result would be attained during the last half of 1665 than had arisen from the orerations of the previous six months, has been fully borne out. The Cadiangullong Mines are in a more prosperous position. At the meeting, to be held on May 4, Messrs. De Vitrè and How retire from the direction; Messrs. De Vitrè and A. W. Young offer themselves for election. Mr. C. Whetham, the retiring auditor, offers himself for re-election.

At the Quebrada Company half-yearly meeting, to be held this day, the report of the directors, to be submitted, states that the description given in Col. Strange's report of the company's property was so full, so detailed, and brought up to so late a date, that the directors felt they had little more to add. Since his return the final call of 10s. per share has been made, thus absorbing all the company's capital. Feeling that the limited amount of money remaining would be insufficient to carry on the works in a satisfactory manner, the board has, since his return, confined their operations to the employment of the European staff only. In accordance with the powers given the company by the new Articles of Association, the directors, at the meeting, will propose resolutions to raise additional capital to carry on the works, and will also submit plans for the more speedy development of the wealth of the property. The directors feel assured that the statements previously made with regard to the value of the property have not at all been exaggerated, and they have every confidence that, if supported by the shareholders, and supplied with the additional requisite capital, they will, with the enlarged knowledge which they now possess of the estates, both speedily, and with no great outlay, realise very considerable returns of profits.

The Pestarena Gold Mining Company have been granted quotation in the official Daily List by the Committee of the Stock Exchange.

On the Stock Exchange there has been a good demand for Mining Shares during the week. The following quotations were officially recorded in British Mining Shares:—Great Wheal Vor, 24, 24¼, 25, 23½, 22½; Great Laxey, 21½; West Caradon, 9¼; Providence, 31; Marke Valley, 3⅞, 3⅝, 4¼.—In Colonial Mining Shares the prices were:—Scottish Australian, ⅝, ¾, ⅞, ⅝; Kapunda, ¼.—In Foreign Mining Shares the prices were:—St. John del Rey, 53½, 55, 54, 53; Cobre Copper, 14½, 13, 15; Chontales Gold, 3, 2⅞, 3, 2⅞, 2⅞; Fortuna, 2⅞, 2⅝; Washoe (5*l.* paid), 2¼, 1⅞, 2⅝, 2¼, 2⅜; Washoe (4*l.* paid), 2, 2¼; Alamillos, 1⅞, 1⅜; Don Pedro, 1⅜, 1¼.

COAL MARKET.—The fresh arrivals this week only number 82 ships, principally steamers. The market has ruled dull throughout, but no change in prices of any description. Hetton Wallsend, 18s. 6d.; South Hetton Wallsend, 18s.; Eden Main, 16s. 6d.; Hetton Lyons Wallsend, 16s. 6d.; Tunstall Wallsend, 16s. 6d.; Hasting's Hartley, 17s. Cargoes unsold, 13; ships at sea, 40.

EXPORTS OF COAL.—By the Monthly Circular of Messrs. Higginson, Liverpool, we learn that the quantity of coal exported in March was 779,924 tons, against 732,401 tons in the corresponding month of 1865, showing a increase of 47,523 tons. The particulars are—From the Northern ports, 364,561 tons; Yorkshire, 30,562 tons; Liverpool, 56,435 tons; London, 5019 tons; Severn ports, 267,118 tons; and Scotch, 56,229 tons. The increase was—Northern ports, 3719 tons; Yorkshire ports, 7105 tons; Liverpool, 10,523 tons; Severn ports, 32,137 tons. The decrease—London, 1949 tons; Scotch, 3472 tons. Total shipments up to March 1, 870,818 tons, against 1,762,660 tons in 1865, showing an increase of 108,158 tons.

The Bank of England returns for the week ending on Wednesday evening was decidedly more favourably, but there is still much room for improvement. Compared with the returns of the previous week, there is shown an increase in the total reserve of notes and coin in the banking department to the extent of 109,344*l.* In the ISSUE DEPARTMENT there is shown a decrease in the notes issued of 36,495*l.*, represented by a corresponding decrease in the gold coin and bullion on the other side of the account. The notes in circulation now amount to 22,161,115*l.*, being a decrease as compared with last week of 142,680*l.*, which decrease is represented the increase in the total reserve added to the decrease in the coin and bullion. In the BANKING DEPARTMENT there is shown on the liability side a decrease in the "other deposits" of 677,149*l.*, and a decrease in the "seven day and other bills" of 13,101*l.*=699,250*l.*, from which must be deducted an increase in the "rest" of 9044*l.*, and an increase in the "public deposits" of 371,688*l.*=380,732*l.*: leaving a total decrease on the liability side of 309,518*l.* On the asset side there is shown a decrease in the "other securities" of 468,862*l.*, and an increase in the "Goverment securities" of 50,000*l.*=418,862*l.*, showing an increase in the total reserve of 109,344*l.*, as stated above. The reserve consists of notes 5,844,205*l.*; and gold and silver coin, 850,456*l.*=6,694,661*l.*

The Barned's Banking Company petition, upon which the Chief Clerk of the Master of the Rolls appointed provisional liquidators, with the necessary powers, on Thursday, was, in consequence of a telegram received from Liverpool, withdrawn yesterday. The Bank of England have taken action in the matter, and yesterday presented a petition for winding-up. An application was forthwith made to his lordship, in open Court (on the ground that it was of the utmost importance to all concerned that the petition should be heard as soon as possible, and that the rules of the Court could not be complied with so as to have the hearing on May 5), to permit advertisements to be inserted in last night's *Gazette*, for a hearing on the Monday following. His lordship made the necessary order.

A MALACHITE STREAM DISCOVERED IN CORNWALL.—About a hundred years since an adit or day level was driven by a company of gentlemen engaged in working mines in a cliff between the town of Marazion and Perranuthnoe church town, a little above high-water mark: the result was that lodes were discovered which yielded returns of copper ore amounting to several hundred thousand pounds. Subsequently this level was driven near the village of Goldsithney, and about twenty lodes were discovered running in a parallel direction; these lodes are intersected by various east and west lodes, as well as cross lodes. Many of the latter yield immense quantities of the hematite and white iron ores. Some of the latter ores are said to contain silver. Four or five of these lodes only have been wrought on—Huel, Caroline, Neptune, Charlotte, Trenow Consols, and the Tolvadden Mines. Suddenly this stream of water issuing from these or other lodes have changed its appearance from the red oxide of iron to the strongest copper or mineral water ever seen, probably, in the county—in fact, the whole beach where this stream runs over turns everything it comes in contact with as green as malachite, to the astonishment of everyone who has seen it, and quite a sensation has been caused in the neighbourhood. Several gentlemen have visited the spot, many of whom have had great experience in mines in various parts of the world, but all agree they have never in all their experience seen any water so strongly impregnated with copper as this water appears to be. The inference is that something volcanic has occurred, and that this water is issuing from a great deposit of copper ore not yet discovered in some of the parallel lodes.

IMPROVED MINE PUMP.—Reference has frequently been made in the *Mining Journal* to the ingenious "Californian pump," invented by Mr. Thomas Hansbrow, and which attracted such attention at the International Exhibition of 1862; and it appears that Mr. Hansbrow is now introducing a modification of the pump, which possesses great forcing power, and is considered to be applicable to mining and fire-engine purposes. The pump valves are of the same construction as those of Hansbrow's other celebrated patent pumps. The power is communicated directly from the steam cylinder to the pump by means of the piston rod, on one end of which is the steam piston, and on the other end the piston of the pump. There is no crank, shaft, or fly-wheel, and the valve receives its motion from the piston-rod by a very simple arrangement of rocking lever and tappets. The steam cylinder, pump cylinder, and bed plate form one casting, thereby making it extremely simple, not liable to get out of order, and most substantial in its construction. It requires but little foundation, needs no setting, and can be secured to any beam or planking by screws supplied for the purpose.

RAILWAY WAGON COMPANIES.—The North-Eastern Iron and Wagon Company (the formation of which we referred to in the Journal of April 7), in their prospectus, say—"That wagon companies are profitable to the shareholders may be inferred from recently-published reports. The Midland Wagon Company, established in 1853, have now between 7000 and 8000 wagons let on hire, at fixed or redemption rentals, and their last dividend was 15 per cent. The Oldbury Carriage and Wagon Company, with 3*l.* paid, declared a dividend of 15 per cent., and a bonus of 1*l.* per share; their shares are about 100 per cent. premium. The Scottish Wagon Company, and the Gloucester Wagon Company, each declared a dividend of 12 per cent. The Ashbury Company, Manchester, who are iron manufacturers and wagon builders, have paid, since the formation of the company, in 1863, dividends of about 25 per cent. per annum, and their shares have sold at 30*l.* to 120*l.* premium. The Bristol and South Wales have just paid 10 per cent. and a bonus, whilst the Monmouthshire, North Central, South of England, Taff Vale, and Western Wagon Companies pay satisfactory dividends, and the shares are eagerly sought after."

ENGRAVING ON CRYSTAL OR GLASS.—A new method is now practised in many of the ornamental glass manufactories in France of dull engraving on crystal or glass surfaces. This consists in the substitution of liquid fluorhydric acid in a nascent state for the gaseous fluorhydric acid most commonly used for this purpose. The deleterious and even dangerous effects of the use of this gas are well known, whereas the liquid is perfectly innocuous, as far as respiration is concerned, for the gas is quite fixed. The latest experiments have proved that:—1. If to 1000 grammes of water, for example, we add 250 grammes of fluorhydrate of fluoride of potassium, well crystallised, and 250 grammes of hydrochloric acid of commerce, we obtain a bath in which crystal and glass are rapidly dulled on their surfaces, but the frosting thus produced is not sufficiently deep nor regular.—2. To render the fluorides of lead or of calcium less soluble, or altogether insoluble, in the above bath, and to obtain depressions of an even and sufficient depth, we must add to this bath sulphate of potash, till the liquid is nearly saturated, say about 140 grammes.—3. That sulphate of ammonia and oxolate of potash, and some chlorides, with a great affinity for water, such as the chloride of zinc, can replace the sulphate in order to render the fluorides of lead and lime. For more than a year past at the works at Baccarat, Saint-Louis, and also at Metz, engraving on crystal and glass has been carried on by similar reactive baths.

PETROLEUM.—The following are the particulars of the exports of petroleum from the United States from Jan. 1 to March 24:—

	1866.	1865.
New York	Gallons 7,026,816	Gallons 1,776,760
Boston	271,490	249,227
Philadelphia	3,752,257	247,629
Baltimore	356,481	157,949
Portland	205	2,330
Total exports from United States..	11,413,433	2,433,895
Same time 1864		5,595,341
Same time 1863		9,324,903

IQUIQUE, IN PERU, which furnishes nitrate of soda to the entire world, is a small seaport town, at the foot of steep mountains, on the border of which a sort of terrace supports the houses forming the town. This shore is large enough to receive the merchandise of the traders. The nitrate of soda is brought from the interior of the country, and is extracted from a district about 90 miles from the sea, called Atacama, where it forms beds, more or less thick, mixed with argil, extending over a surface of 50 leagues. The valley from which the salt is extracted is 30 miles long by 15 wide; there the nitrate is submitted to the first operation of cleansing, after which it is put into sacks, to be carried on asses' backs to the port of Iquique, where it is stored. When the captain of a vessel wishes to take a cargo of nitrate of soda, the simplest way is for him to repair at first to Valparaiso, and to make arrangements with the commissioners who engage to furnish the quantity of soda demanded. The animals which are to carry it across the country are then embarked, and along with them fodder and water to drink, for in that country there are neither grass, river, nor fountain. Although these extraordinary preparations would seem likely to hinder the exportation of the nitrate of soda, it is, however, carried on actively, and on a large scale. When the sacks which contained the barley for the asses are empty they serve for carrying the soda, with which they are filled on return of the convoy; this latter consists ordinarily of 1000 animals and the trade is so brisk that they are in perpetual movement. Each ass carries at an average from 350 to 400 lbs.; going it carries its food, returning it is laden with the nitrate. Trist and barren, the district produces nothing but nitrate of soda; every necessary of life is imported to it; cold and humid, the climate is anything but inviting, therefore no colonists have ventured to establish themselves there.

At Cook's Kitchen Mine meeting, April 19, a loss was shown on the three months of 848*l.*, and a debit balance to be provided for of 1530*l.* A call of 10s. per share was made. The costs (3879*l.*) are charged to January only, and are very heavy, including labour 2645*l.*, bills 1129*l.*, and interest 21*l.* The tin is credited up to the day of meeting (59 tons) 3005*l.* They owe to merchants 3581*l.*, water rents 112*l.*, and dues 563*l.*, against which there are various assets. It was resolved that, owing to the great depression in mining, and the heavy calls now pressing severely on the shareholders, an application be made for a remission of dues. A great expenditure has been laid out here on the dressing-floors. One shareholder still holds 631 shares here, as well as 80 shares in Stray Park.

An opportunity now presents itself for the lords of the mines to step forward and assist the adventurers, by remitting entirely or a portion of their dues, as circumstances may demand. At Cook's Kitchen meeting, a few days since, the adventurers resolved to apply for a remission of dues, and we hope they will succeed, as the mine is evidently very poor, and cannot be worked except at a considerable loss. Mr. Robartes has set a noble example to the lords of Cornish mines, having granted a new lease to Tincroft adventurers for 21 years, at 1-26th dues, and given 200*l.* towards the erection of a man-engine, which blessing to the miners ought to have been at work at Tincroft long since. Mr. Robartes acted with this liberality long before the price of tin went down so fearfully, and when the mine showed the brightest prospects. Such noble acts are worthy of permanent record, and will be sure in the long run to be rewarded. We could point to many mines which have been ruined, and mining property, for the present at least, destroyed, by the illiberal and short-sighted policy of some lords. The great liberality of the late Lord de Dunstanville, and his daughter, Lady Basset, undoubtedly prevented many mines being stopped about 30 years since, when a period of great mining depression had set in.—*West Briton.*

Mr. J. ARTHUR PHILLIPS, who has just returned from California, has brought with him a collection of very curious minerals (some of which would appear to go far to explain the formation of mineral veins), which will be first exhibited at the conversazioné of the Royal Society, this evening (Saturday). Mr. Phillips has also acquired a vast amount of valuable information respecting the position and prospects of the mines in Colorado, Nevada, &c., and descriptions of the machinery employed, with photographs and plans of the most ingenious, which we believe he intends to embody in a work, the value of which, from one so reliable and competent, will be well understood by many of our readers.

LEAD ORES.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
April 20	Great Laxey	100	£22 16 0	Sims, Willyams, & Co.
24	Isle of Man	100	24 7 6	Panther Company.
	West Nanty Mine	46	12 17 6	ditto
	Grit and Stapeley	38	13 1 0	Walker, Parker, & Co.
	ditto	38	13 1 0	Panther Company.
	Maesyafn	60	13 12 6	Panther Co.
	ditto	60	13 11 6	Walker, Parker, & Co.
26	Mount Pleasant	8	13 12 0	A. Eyton.
	ditto	3	15 18 0	Walker, Parker, & Co.
	Bryngwyn	5	13 12 6	A. Eyton.
	ditto	3	16 2 6	ditto
	Pant-y-Mwyn	15	12 18 6	ditto
	Summer Hill	5	13 18 0	ditto
	North Henblas	15	12 16 6	Walker, Parker, & Co.
	Dog Pit	16	12 10 6	A. Eyton.
	Llangynog United	26½	12 17 6	Walker, Parker, & Co.
	Llanerchyraur	11½	13 12 6	A. Eyton.
	Dyfngwm	17	13 5 6	ditto
	Roman Gravels	25	13 11 0	Walker, Parker, & Co.
	Rhosesmor	10¼	13 5 6	A. Eyton.

BLACK TIN.

Date.	Mines.	Tons c. q. lbs.	Price per ton.	Amount.	Purchasers.
April 21	Pedn-an-drea	11 8 2 12	—	579 16 0	—

COPPER ORES.

Sampled April 11, and sold at Tabb's Hotel, Redruth, April 26.

Mines.	Tons.	Price.	Mines.	Tons.	Price.
South Caradon	116	£5 9 0	Fowey Consols	61	£5 6 6
ditto	61	5 2 6	Phœnix Mines	69	2 8 6
ditto	60	5 6 6	ditto	44	2 9 0
ditto	55	5 12 0	ditto	42	2 4 6
ditto	54	15 3 6	ditto	27	1 15 6
ditto	47	14 11 0	ditto	8	9 3 6
ditto	45	15 9 0	ditto	1	27 0 6
ditto	35	6 9 6	Wheal Rose	70	3 9 0
Clifford Amalgamated	81	2 7 6	ditto	61	3 2 6
ditto	75	1 10 6	ditto	50	3 3 0
ditto	64	0 12 6	Glasgow Caradon	53	2 18 6
ditto	61	0 11 0	ditto	49	3 5 6
ditto	42	2 8 0	ditto	44	5 17 0
ditto	32	6 11 0	Great North Downs	67	3 8 0
ditto	25	3 15 6	ditto	46	2 12 6
ditto	20	2 18 0	Craddock Moor	64	5 19 0
West Damsel	67	2 16 6	ditto	31	4 19 0
ditto	61	2 16 6	ditto	16	1 17 0
ditto	60	3 3 0	Hallenbegle	45	3 11 6
ditto	59	2 3 0	ditto	28	3 1 0
ditto	39	4 12 0	Great Brigan	57	6 3 0
ditto	35	2 18 6	Grambler & St. Aubyn	30	5 0 6
Fowey Consols	77	4 0 6	Buckingham's Ore	14	0 11 6
ditto	70	3 0 8	Boscawen	6	1 16 0
ditto	62	4 0 6	Great Crinnis	1	7 12 6

TOTAL PRODUCE.

South Caradon	473	£3997 10 0	Craddock Moor	111	£ 563 17 0
Clifford Amalgam..	400	843 1 6	Hallenbeagle	73	246 5 6
West Damsel	321	969 4 6	Great Brigan	57	350 11 0
Fowey Consols	270	1096 1 0	Gram. & St. Aubyn	30	150 15 0
Phœnix Mines	191	516 18 6	Buckingham's Ore..	14	8 1 0
Wheal Rose	181	589 12 6	Boscawen	6	10 16 0
Glasgow Caradon..	146	572 18 0	Great Crinnis	1	7 12 6
Great North Downs	113	348 11 0			

Average Standard..... £110 12 0 | Average Produce 6⅜
Average Price per ton £4 6 0
Quantity of Ore ..... 2387 tons | Quantity of Fine Copper, 152 tons 2 cwts.
Amount of Money £10,261 15 0
LAST SALE.—Average Standard..... £119 0 0.—Average Produce 5⅜
Standard of corresponding sale last month, £114 10 0.—Produce, 6¼.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

Names.	Tons.	Amount.
Vivian and Sons	230½	£1148 19 3
Freeman and Co.	75½	847 8 0
Grenfell and Sons	321 5-6	1704 8 6
Sims, Willyams, and Co.	183½	907 11 9
Williams, Foster, and Co.	240 5-6	1207 15 6
Mason and Elkington	242½	1103 12 0
Bankart and Sons	215½	635 2 9
Copper Miners' Company	139½	592 1 6
Charles Lambert	202 5-6	873 12 3
Sweetland, Tuttle, and Co.	250½	449 10 9
Penclawdd Copper Co.	50	157 10 0
Crown Copper Company	234½	634 2 9
Total	2387	£10,261 15 0

Copper ores for sale at Tyack's Hotel, Camborne, on Thursday next.—Mines and parcels.—Clifford Amalgamated 767—West Seton 507—East Wheal Grenville 174—Wheal Basset 162—South Frances 132—Tolcarne 120—South Condurrow 104—North Roskear 97—East Pool 78—South Tolgus 76—Bampfylde 55—Nangiles 50—North Grambler 42—North Crofty 25—West Condurrow 21—West Stray Park 19—Wheal Grenville 16—Wheal Harriett 14.—Total, 2456 tons.

Copper ores for sale at Tabb's Hotel, Redruth, on Thursday week.—Mines and parcels.—Prosper United 373—East Carn Brea 326—Wheal Margery 256—West Basset 176—East Roswarne 147—Copper Hill 110—Wheal Curtis 104—Levant 93—New Roswarne 62—North Basset 56—Wheal Buller 42—New Treleigh 42—Boscaswell 37—Crowan Consols 33—Wh. Union 23—Higgins's Ore 21—Tolvadden 11.—Total, 1912 tons

WATSON AND CUELL'S MINING CIRCULAR.

WATSON AND CUELL,

MINING AGENTS, STOCK AND SHARE DEALERS, &c.

1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

MESSRS. WATSON AND CUELL having made arrangements for transferring their weekly Circular, which has had so large a circulation during the past ten years, to the columns of the *Mining Journal*, their special reports and remarks upon Mines and Mining, and the state of the Share Market, will in future appear in this column.

In the year 1843, when Cornish mining was almost unknown to the general public, attention was first called to its advantages, when properly conducted, in the "Compendium of British Mining," commenced in 1837, and published in 1843, by Mr. J. Y. WATSON, F.G.S., author of "Gleanings among Mines and Miners," "Records of Ancient Mining," "Cornish Notes" (first series, 1862), "Cornish Notes" (second series, 1863), "The Progress of Mining," with statistics of the Mining Interest, annually for 21 years, &c., &c. In the Compendium, published in 1843, Mr. WATSON was the first to recommend the system of a "division of small risks in several mines, ensuring success in the aggregate," and Messrs. WATSON and CUELL have always a selected list on hand. Perhaps at no former period in the annals of mining has there been more peculiar need of honest and experienced advice in regard to mines and share dealing than there is at present; and, from the lengthened experience of Messrs. WATSON and CUELL they are emboldened to offer, thus publicly, their best services to all connected with minesor the marke, as they have for so many years done privately, through the medium of their own Circular.

Messrs. WATSON and CUELL transact business in the purchase and sale of mining shares, and other securities, payments of calls, receipt and transmission of dividends, obtaining information for clients, and affording advice, to the best of their knowledge and judgment, based on the experience of more than 30 years active connection with the Mining Market.

Messrs. WATSON and CUELL also inform their clients and the public that they transact business in the public funds, railway, docks, insurance, and every other description of shares dealt in on the Stock Exchange.

Messrs. WATSON and CUELL are also daily asked their opinion of particular mines, as well as to *recommend* mines to invest or speculate in, and they give their advice and recommend mines to the best of their judgment and ability, founded on the best practical advice they can obtain from the mining districts, but they will not be held responsible, nor subject to blame, if results do not always equal the expectations they may have held out in a property so fluctuating as mining.

Messrs. WATSON and CUELL having agents and correspondents in all the mining districts, and an extensive connection among the largest holders of mining property, have the more confidence in tendering their advice on all matters relating to the state and prospects of mines and mining companies, and are enabled to supply shares in all the best mines at close market prices, free of all charge for commission.

[Several communications are unavoidably postponed this week.]

NEW INVENTIONS.

PROVISIONAL PROTECTION for six months has been granted for the following:—

W. T. COOKE, Aberia, near Carnarvon, and G. HUNTER, Maentwrog, Merionethshire.—Improvements in machinery used in cutting stone, slate, and other minerals, and in forming tunnels, galleries, and roads. Feb. 12.

P. H. ASHBERRY, Sheffield.—Improvements in machinery for the manufacture of articles usually made in Britannia metal, pewter, German or nickel silver, and silver; and improvements in the manufacture and ornamentation of such articles, parts of which last-named improvements are also applicable to other purposes. March 10.

LETTERS PATENT have been issued for the following:—

W. T. COOKE, Aberia, near Carnarvon, and G. HUNTER, Maentwrog, Merionethshire.—Improvements in machinery for cutting or getting slate, stone, coal, and other substances. Dec. 20.

H. N. PENRICE, Witton House, near Norwich.—Improvements in machinery employed in forming tunnels and galleries in rocks. Jan. 8.

J. BERNARD, 47, Lincoln's Inn-fields.—Improvements in tools and apparatus employed in blasting, boring, and cutting rock stone, slate, and other substances, and in the means employed for making such tools. Oct. 27.

E. MELDRUM, Bathgate.—Improvements in the distillation of coal shale, and in the apparatus employed therein. Oct. 30.

SPECIFICATIONS published during the week:—

Boring and blasting rocks, 10d.; cutting coal, 1s. 6d.; manufacture of pig-iron and castings, 6d.; puddling iron, 4d. L. DE FONTAINEMOREAU.

The NEW HYDRAULIC PRESS, invented by MM. Desgoffe and Olivier, civil engineers, has excited considerable attention, owing to the satisfactory results obtained after a long practical trial. The principle on which it acts is so simple that we wonder it was not thought of long ago. There is no forcing or injecting pump, and instead of a liquid being introduced into the press, already filled, a rope is made to enter, and as it enters it gradually displaces the liquid, causing the plunger to rise. As the substance introduced into the apparatus is solid, the inventors have given it the appropriate name of Sterhydraulic Press (stereos). There are two pulleys or drums, one inside the press, and the other outside; on the outside pulley is coiled a rope, which passes through a stuffing-box into the interior, when it is wound round the other pulley. The recipient being full of liquid, the inner pulley being set in motion, it is plain that the rope as it coils will occupy the place of the piston, and cause it to rise. When the reverse motion is required the outer drum is set in motion, and the cord is wound out of the press, the piston descending accordingly. Oil is the liquid with which the chamber is filled, and the rope is made of gut. The joints of the piston and of the axes of the internal pulley are made staunch with leather collars: that of the rope is simply tow. There is no leakage where the rope enters, as when the press is at work any tendency of the liquid to escape is met by the velocity of the rope as it enters in a direction opposed to the effort of the liquid to escape. As these presses are, for the present, only to replace vineyard and oil presses of the olden times, they have as yet only been made up to a force of 50 tons.

ANNEALING WIRE.—A new principle has lately been introduced in the manufacturing process of wire-drawing, which, from the opportunity we had of examining it, appears to be of a most valuable description. The patentee is Mr. John Hibell; and the firm in which he is a partner (Messrs. J. Hibell and W. R. Colbourn, Long Acre, Nechells) is the only one at present using the new process. The improvement consists of an entire alteration of the method of annealing. Under the old system annealing pots consisted of hollow cylinders of cast-iron, closed at the bottom, and furnished with a lid or cover at the top, which was closed nearly air-tight during the annealing process. These pots were built in a furnace, and charged with the articles required to be annealed. When the pots were filled, the furnace was heated to the required degree, and allowed to cool, together with the pots. By this process, however, the surface of the wire became more or less covered with scales, which had to be removed by pickling, before the wire could be drawn to the required thickness. By the new process the annealing pots are constructed of two hollow cylinders of cast-iron, of different diameters, the smaller one being placed within the larger; a ring-like space is thus left between the two cylinders, which constitutes the chamber in which the articles to be annealed are placed. The bottom of this chamber is closed; and the top is also closed and made air-tight during the annealing process. When these pots are placed on the furnace, the flames not only encircle them, but come up through the hollow centre; and the wire is thus more thoroughly and uniformely heated. They are made air-tight by a very simple process; and when the wire is taken out it is as smooth as possible; there is no scale about it, and, therefore, does not require pickling, as under the old system. The quality of the wire is also much improved; it is considerably more ductile, and a considerable saving is effected in weight, as the process of pickling reduces the wire considerably. Under the old system a No. 4 rod, before it could be drawn to No. 18, would require pickling six times, and annealing five times; under the new system the same rod requires pickling once, and annealing once. By the old process it would take eleven days to draw the wire to the required thickness; but by the new plan it is done in five days. It will, therefore, be seen at once that the saving of time, fuel, and vitriol (for pickling) must be very great, while the quality of the wire must be much improved. The new pots take four diameters of wire; they are only 18 in. in depth, but hold 10 cwts. 2 qrs. Being so much smaller than the old ones they can be easily moved about. The application of this process is of great importance to the trade.—*Birmingham Journal.*

THE COAL MINES OF CHINA.—We may state that, having examined coal, including lignite, from nearly every part of the world, we have seen no steam coal superior to that from the neighbourhood of Pekin, where it is reported that a magnificent coal field exists, not less than 300 miles in extent. This report is founded on a personal communication from a geologist who has spent three years in the exploration of that coal field. We have received several samples of Chinese coal, and we find them to differ much in quality. In 1862 they were tried in some of her Majesty's ships, under the command of Admiral Sir James Hope, and the results obtained were precisely such as the composition of these coals, which has been accurately determined, would indicate. The day will arrive when the coal mines of China will prove a source of wealth and power, and may possibly determine who shall exercise naval predominance in the East. These mines, in order to their successful development, must be worked under the direction of colliery engineers of experience and skill, and will require the introduction of steam-winding and pumping machinery. But the Chinese authorities dread all such foreign innovations, especially as they must for a considerable period be under the supervision of despised barbarians. Perhaps, they may be disturbed by a vision of what has befallen India. If, unhappily, we should again be involved in war with the Celestials, and again be victorious, it might be well to stipulate for a concession of a portion, at least, of this great coal field.—"Coal and Smoke," in the *Quarterly Review*.

GOLD MINING IN COLORADO.—We have carefully collected a few facts relative to the products of our mills, furnaces, and mines for the last two weeks ending on Tuesday last, and have made some estimates based thereon, which cannot fail to prove interesting. At one establishment on Clear Creek—we refer to the Mammoth Mill, conducted by Behr and Keith—the average yield for nearly a month past has been over 300 ozs. of gold per week, and valued at $5400. The gross expense for crushing, amalgamating, and handling ore is estimated at only $600 per week, the ore producing (say) an average of $500 per cord, which is less than any has yielded, treated by their process. When these works shall have been completed and their capacity doubled, as is now being rapidly done, the yield may be multiplied by two. In a short time we can safely estimate the production of gold from this establishment alone at $2000 per day, or $660,000 per working year of 300 days. The Keith process is also in successful operation at Gold Dirt, in this county, yielding satisfactory returns, though we are at present unable to give the figures. Other similar works are being commenced and projected in various localities. There is no doubt that the total yield from this source alone will amount during the year to many millions. Lyon's imperial success is too well known to need recapitulation. His extensive works produce bullion by the hundreds of pounds, and will soon beestimated by the ton. And then his process is capable of saving all—lead, silver, gold, copper, and everything valuable contained in the ore: 30 per cent., or nearly one-third of his bullion is gold, and he will in future furnish to Clark and Co., bankers, for shipment, 200 lbs. of bullion every two weeks, except in case of serious interruptions, arising from accidents to flues, furnaces, or machinery. Only think of it; at this rate over 2½ tons of the "ringing metals" for the year! or in value some half million of dollars. And when we remember that Lyon is projecting four additional furnaces of equal capacity to those now employed this season, to say nothing of other parties about duplicating his works, we can safely count the product from the smelting process, too, during the year, at many other millions of dollars. In brief, without going into further details, we have ascertained that 1000 ozs. of gold retort was shipped for all courses from this county during the week ending the 6th instant; and for the week ending the 13th instant the shipment increased to 1400 ozs. in gold.—*Colorado Miners' Register*, March 20.

Notices to Correspondents.

*** Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be regularly *filed* on receipt: it then forms an accumulating useful work of reference.

THE OIL-PRODUCING ROCKS.—Can any reader kindly inform me where I can get the best information regarding the coal or shale oil-producing measures, and where I could see them best when first worked?—VIEWER.

STEAM COAL.—Will some reader oblige by communicating the selling price of steam coal in 1863 and now at Great Grimsby, Lincolnshire? That the trade is greatly increasing and the price rising I know, but I want the particulars.—R.

HAND OR WATER POWER DRILLING MACHINERY FOR MINES.—Is there any machine invented for boring rocks in a confined space, such as a lead mine drift, that could be worked by manual labour, and does not cost much in the first outlay? Manual, or perhaps water, power only would be applicable where I want it.—LEAD MINER.

ROCK-DRILLING MACHINERY.—In last week's Journal there appeared a short description of an improved drilling-machine, invented by Mr. G. A. Gardner, of New York, and I feel sure that all those who are as desirous as myself of seeing manual boring superseded in metallic mines would be greatly obliged to Mr. Gardner if he would, through the medium of the Journal, furnish a more detailed account of his machine and its capabilities, together with some convincing proof of its being practically adapted to the advantageous performance of the various species of underground excavation, such as driving, stoping, sinking, &c. Would Mr. Gardner also state the cost of the machine, and where it may be seen and procured?—INQUIRER.

SITHNEY AND CARNMEAL.—Some four weeks since I saw in the Journal a notice of petition for winding-up the above mine in the Stannaries Court, which I was very pleased to see, but since that time have not seen any account of what has been done. I am a shareholder in the above mine, also Wendron Consols and New Wendron, the three mines being managed in Mr. Frederick Hill's office, Helston, and from which I have never seen a statement of assets and liabilities produced; meetings are held and calls made, but we do not know if collected, and how we stand with the merchants. The winding-up of Sithney and Carnmeal in the Court, I fear, will show a heavy amount of unpaid calls.—AN UNFORTUNATE SHAREHOLDER.

ROSEWARNE UNITED.—In reply to "A Shareholder," in last week's Journal, the "apparent anomaly" can only be explained on the ground that investors too often take advice, and do not as a rule sufficiently rely upon their own judgment, in making purchases, which is apparent from the fact that at the last sale Rosewarne Consols ore made only 275*l.*, and there was a call of 6s. the last meeting. Whereas at Rosewarne United no call was required, and the ore sold for 1355*l.*; and as 500*l.* has been recently expended in machinery, now in good working condition, and the agent reports that the reserves of ore have increased, a dividend may reasonably be expected ere long.—ANOTHER SHAREHOLDER.

MAN-ENGINE.—The letter should be forwarded to the parties referred to. It would be sure to meet with proper attention.

TREWEATHA.—"W. R."—This mine is situated about a mile north of Trelawny, near Liskeard, and was worked for several years until 1858, to the depth of 100 fms., on a small lode, which proved rich and profitable; but it was then thought advisable to remove the engine 200 fms. further north, on a large and exceedingly promising lode, discovered by costeaning, and on which a shaft has been sunk 50 fathoms, and levels driven at different points, showing extraordinary indications of a great mine, the deeper levels yielding increased quantities of rich silver-lead ore. For some time, however, the workings have been impeded by the quantity of water that came from the old mine, and found its way into the new mine. There has lately been another 50-in. cylinder engine erected, by which the mine will now be kept effectually drained, and if the lode should prove as rich as anticipated a most productive and profitable mine will be the result.

Mr. Campin, of Middle Temple-lane, barrister-at-law, supplied the report appearing in another column, of the important case of Jordan *v.* Moore.

*** A great pressure of matter, received yesterday, compels us to postpone several articles and letters, including—"A Cornishman," on North Cornwall; Capt. John Lean, on East Carn Brea; Mr. W. B. Kingston, on the Wallachian Petroleum Company; Mr. W. Austin, C.E., on the Working and Manufacture of Peat; Mr. Childs' Stamping and Crushing Machinery; What is Copper used for? &c.

THE MINING JOURNAL

Railway and Commercial Gazette.

LONDON, APRIL 28, 1866.

A NEW SOURCE OF BURNING OIL.

THE CANNELITE OF NEW BRUNSWICK.

The discovery and application of new materials, capable of supplying pabulum for heating or illuminating purposes, is certainly one of the most striking features of recent mining and manufacturing enterprise. Native petroleum, freshly springing from the bowels of the earth, gave the first impulse to a new branch of industry, which promises to become one of the most important of modern times. Men must have light and they must have heat; and if 1 lb. of petroleum or coal oil evaporates twice as much water as 1 lb. of the best bituminous or anthracite coal, or produces twice as brilliant a light as sperm or other oils, at one-half the cost, it will inevitably win its way to public favour, against all opposition and prejudice. The native petroleum wells of America may, and probably will, soon cease to supply the European market; but this is not in consequence of a diminution of yield, it is rather on account of a competitive artificial petroleum which is now being brought into the markets of the world in extraordinary quantities, and at a price which, ten years ago, would have been thought utterly impossible.

We have already called attention to the Cannel coal of Flintshire as a source of artificial petroleum or illuminating oil, also to the shales in Scotland, and the brown coals of Germany; we now propose to describe a new material, which has been named by its discoverers CANNELITE, from the remarkable external resemblance it bears to some varieties of Cannel coal. The existence of a highly bituminous mineral had long been known in Albert county, New Brunswick, in the vicinity of the celebrated Albert Mine, which supplies annually some 15,000 to 20,000 tons of Albertite to the Atlantic cities of the United States, for the manufacture of gas and "kerosene oil." Attempts were made, indeed, some eight or ten years ago to make illuminating oil from the bituminous mineral already referred to, but without commercial success, in consequence of defective apparatus, and inexperience in manipulation. During the Geological Survey of New Brunswick, conducted for the Government of the province by Professor HENRY Y. HIND, special attention was called in his official report, a notice of which appears on another page, to the importance of the Albert shales; and last year Professor HIND, in company with Dr. HAYES, of Boston, made a searching examination into the distribution and origin of the remarkable bituminous beds which characterise the Albert shales. It appears that these beds are, for the most part, made up of comminuted Albertite, the minute particles being cemented together by a calcareous paste. From the great similarity of these beds to deposits of Cannel coal, it has been decided to call the mineral Cannelite. It forms beds of limited extent in the Albert shales, which, lying at the base of the lower carboniferous series of New Brunswick, are in some localities upwards of 1000 ft. thick. The beds of Cannelite vary from 2 to 13 feet in thickness, and the best quality yields when distilled fully 50 gallons of crude oil to the ton of 2240 lbs. A remarkable and very important characteristic of Cannelite is the ease with which it yields up its volatile products. It does not swell in the retort, and is completely exhausted within eight hours, some varieties leaving a coke behind like vesicular lava, others a bulky ash, and nearly of the same form as the original material, yet containing, according to the analysis of Dr. HAYES, 16 per cent. of fixed carbon.

Experiments on a large scale have been made with Cannelite at Salem, Massachusetts, by Mr. JOHN HOWARTH, who last autumn purchased many hundred acres of Cannelite ground on the Petitcodiac and Memramcook rivers, at or near the head of the Bay of Fundy. Mr. HOWARTH imported between 2000 and 3000 tons of Cannelite, and finds the yield to be 51 gallons of very superior oil from 1 ton of the material. He employs superheated steam, which, with Cannelite, appears to succeed admirably. The available deposits between the Petitcodiac and Memramcook rivers are estimated to exceed 20,000,000 tons of the best Cannelite, which represents the enormous quantity of 1,000,000,000 gallons of crude oil. This vast treasure lies on an area of 2700 acres, and is situated above tide-water. How far the beds of Cannelite extend to the north remains to be seen. Other important deposits of this material occur on the flanks of the Caledonia mountain range, about 10 miles from the seaboard.

Commercially, the discovery and application of Cannelite is of the greatest importance to New Brunswick; for it has been proved that an excellent marketable crude oil can be manufactured and placed on shipboard for 12½ cents, about 5½d. sterling, package, interest on capital, and all expenses included. The crude oil can be laid down in Liverpool for 18 cents, or about 9d. sterling; and if a cheaper and more convenient kind of package than the expensive barrel can be used, the cost will not exceed 4½d. per gallon on board, or 7½d. in dock at Liverpool. The specific gravity of the crude oil is 29° BEAUME.

The recent abrogation of the Reciprocity Treaty has suddenly stopped the exportation of this material to the United States, and it is now proposed to erect extensive manufactories on the Cannelite beds themselves, and to export the crude oil to Europe. There are already three companies, who are commencing operations on a large scale. The Caledonia Company, whose territory is the same as the area occupied by a former company some ten years ago, to which reference has already been made. The Turtle Creek Company, who contemplate erecting works with one hundred retorts, as a first or preliminary step, and who are now constructing a railroad to tide-water, their Cannelite ground being situated about 10 miles from tide-water. The Westmoreland and Albert Company, on the Memramcook and Petitcodiac rivers. This property was purchased last summer by Mr. JOHN HOWARTH, of Salem, Massachusetts, with a view to export the Cannelite to Boston, or to his works at Salem, 16 miles from Boston. Sections of the Cannelite beds on this property are exposed in a cliff some 60 feet high, on the banks of the Memramcook, where the tide rises to the astonishing altitude of 40 to 45 feet, and it is from these beds that the mineral has been taken for shipment to the United States. A short railway leads from the Cannelite "quarries" to a wharf where vessels of many hundred tons can load, and as the Cannelite can be put on board for about 4s. per ton, it was confidently anticipated by the proprietor last autumn, that large importations into the United States would immediately take place. But the abrogation of the Reciprocity Treaty has stopped all that, leaving no alternative but to manufacture the oil on the spot, or at some suitable locality in New Brunswick, or the adjacent province of Nova Scotia.

From all we can learn, it appears well established that Cannelite possesses many advantages which must commend it to commercial men. Unlike the production of petroleum from oil wells, the manufacture of oil from this mineral is certain and permanent. The cost at which it can be placed on board from the Memramcook and Petitcodiac beds is exceedingly low, 5½d. being the maximum per gallon, and there are excellent grounds for the expectation that, with improved retorts, it can be shipped at 4d. per gallon for crude.

In Prof. HIND's official report a general description is given of the distribution of the Albert shales, in New Brunswick, and a chapter is devoted to the origin of Albertite, or Albert coal. It is important to notice in this connection that the Albert shales containing the beds of Cannelite are themselves highly bituminised, and yield from 20 to 35 gallons of oil per ton. Some of the shale beds on the Memramcook, on Mr. HOWARTH's property, have yielded 30 gallons per ton, and are from 20 to 50 feet in thickness, but these are considered valueless at present, in view of the richer beds of Cannelite which they contain. When it is taken into consideration that the Albert shales have been traced by Mr. HIND for a distance of 50 miles in length, by 15 in breadth, and that they are everywhere highly bituminous, their influence on the future of New Brunswick cannot be over estimated. But as long as Cannelite can be found yielding 51 gallons of oil to the ton, at an expense not exceeding 5½d. per gallon, the matrix shales will not attract the attention they will one day receive. They are like our Scotch shales compared with the rich Cannels—a storehouse of wealth, to be attacked in due season, when gas fuel for metallurgical purposes shall have asserted and established its claim to general adoption. So rapid is the progress of discovery among our American cousins that, although the new mineral we have just noticed was only named and described by Messrs. HIND and HAYES in July last, we see from our exchanges that "Cannelite" has been discovered in Nevada territory associated with an injected mineral so closely resembling Albertite that it is almost impossible to distinguish hand specimens. The Albertite of New Brunswick is of Devonian origin, and injected into Lower Carboniferous rocks. The Albertite of Nevada territory is of Tertiary age; both are regarded as inspissated, or oxygenised, petroleums.

THE PORTUGUESE INTERNATIONAL EXHIBITION—No. III.

BY CHARLES B. KING, C.E.

The English department of the Exhibition was scarcely one of which we could boast or feel proud, and may probably have arisen from insufficiency of advertising, seeing that all our leading manufacturers and art workers were conspicuous by their absence. In the Engineering department, where, as in many others, we can teach the world, we find a mere handful, and our great manufactories of the textile fabrics were totally unrepresented. Letts, Son, and Co., of the Royal Exchange, exhibited a case of beautiful ornamental and plain stationery; Messrs. Emmanuel, of Portsmouth, sent some jewellery and watches; Messrs. Parkinson and Frodsham a case of chronometers; Messrs. Elliott and Co., of Charing Cross, a case containing specimens of their celebrated philosophical and mathematical instruments; Mr. Henry Greene, of Cannon-street, London, exhibited gaseliers, crystal, porcelain, and biscuit ware; Mr. Fred. Kirkby, of Leeds, samples of his cloth manufactures; Messrs. S. W. Silver and Co., of Cornhill, furniture, and emigrants' requisites; the Hill Pottery Company, Staffordshire, porcelain and china ware; Messrs. Maw and Co., Broseley, Staffordshire, mosaic pavements; Eugene Rimmel, Strand, London, perfumery; Messrs. Spill and Co., of Hackney Wick, India-rubber goods; Messrs. Bradbury and Co., and Messrs. Nissen and Parker, of London, specimens of bank note engraving; Mr. F. W. Flower, of Oporto, samples of India-rubber goods by Messrs. Warne and Co., Tottenham; Mr. W. Mitchell, Oporto, lamps for petroleum; Messrs. Pim Brothers and Co., Dublin, Irish poplins; Messrs. Johnston and Carlisle, of Belfast, samples of their linen manufactures; Messrs. J. and S. Wyon, some specimens of medallions engraved by them, and a bust of H.R.H. the Princess of Wales in white marble; Messrs. Heaton and Co., specimens of coinage for foreign Governments; Messrs. Blackwell and Co., Oxford-street, sadlery and harness; Messrs. Hooper and Co., Haymarket, an open barouche carriage; Mr. T. R. Starey, Nottingham, also a barouche; Messrs. Thrubb and Maberly, Oxford-street, appear as manufacturers of a small mail phaeton, and an open barouche; Messrs. Tucker and Son, of Arundel Works, Strand, have some gas and chandeliers of their manufacture; Messrs. Barry and Co., and Mr. J. R. Kenyon, of Sheffield, iron cuttlery, files, bar-steel, and edge tools; Messrs. Francis Parkes and Co., Birmingham, shovels, &c.; Messrs. Nathaniel Mills and Co. show Weston's differential pulley blocks, hydraulic jack, and punch, a Californian pump, &c., Messrs. Heyward and Tyler, London, show some small hand fire-engines, which are also on the plan of Hansbrow's Californian pump, which was first exhibited at the International Exhibition of 1862, and met with considerable success. Mr. F. W. Flower, of Oporto, shows in the machinery department a small fire-engine, by Heyworth, of Liverpool, and also domestic machinery, washing, wringing, and mangling machines, by the same makers. Mr. C. B. King, C.E., shows a collection of drawings of machinery designed by himself, among which were a drawing of the celebrated observatory for fires erected at Hodges' distillery, a full description of which has appeared in these columns; a design of a 20-horse traction engine, designed by him for the Imperial Society of Agriculture of Russia, and which proved very successful; a design for a peat-compressing machine, for the Right Hon. the Earl of Arran; a steam-coach, to run between Newry and Warrenpoint, for Messrs. Corvill and Sons, of Newry; an improved steam fire-engine, designed specially for Hodges' distillery, Lambeth; machinery designed for Mr. James Mason (now the Barao de Pomaron), for tipping, crushing, and riddling copper ore; and several others, which had been exhibited previously in the International Exhibition of 1862. His Majesty Dom Fernando, late King Regent, exhibited in the Machinery annexe a portable steam-engine and a threshing-machine, manufactured by Messrs. Garret and Son, of Saxmundham. Messrs. Ransomes and Sims, of Ipswich, showed an extensive collection of agricultural machinery of their manufacture, among which were a portable steam-engine and a threshing machine, a portable corn-mill, winnowing and bean-crushing machines, ploughs, and harrows. Messrs. Omerod and Grierson, of the St. George's Foundry, Manchester, exhibited an engine on Allen's American patent, which cannot in this instance be said to have worked even creditably, owing to a bad adjustment of the slide valves, proving unfortunate, as tending to depreciate the value of a system which cannot fail before long to be generally recognised by mechanical engineers: for expanding the steam to its full volume is, perhaps, the only way in which economy in the engine can be produced. This engine drove a small length of shafting, and one of Gwynne's centrifugal pumps, exhibited by Mr. Alfred Allen. Mr. Richard Abbott exhibited his chart of the orthographic projection of the world, for now-a-days an Exhibition would be incomplete without Mr. Abbott, who is most persevering in pressing his theory upon the attention of the public. The Clyde Bottle Company, Messrs. Doulton and Co., potters, of Lambeth, and Messrs. Harper and Moore were also among the exhibitors; also an ingenious manufacturer of boots for cripples and club-footed subjects. Mrs. G. H. Hastings, of Oporto, showed a very pretty chess-table, the sections of which were composed of her own hand sketches of views around Oporto, and bunches of flowers: the whole had a very pretty effect, and testified both to the lady's ability and good taste.

The Portuguese departments were, as may be expected, very voluminous, and among the most noticeable were the jewellery of Messrs. Monrao, of Oporto; the ecclesiastical vestments of Messrs. Ramires, of Lisbon. The show of porcelain from the manufactory of Vista Alegre was very creditable, as also that of glass from Marinha Grande: this factory is of very ancient date, and was originally worked by an Englishman, named Stephens, to whom was granted an exclusive monopoly, by which means he realised a very large fortune. On his retirement he bequeathed the factory, and all it contained, to the Portuguese Government, who have now leased it to Mr. George Croft, of Lisbon, who, with his three partners, are working most energetically to keep pace with foreign manufactures. Their show of imitation Bohemian and other fancy glass is, therefore, very creditable. The furniture exhibited of Portuguese workmanship is also distinctive: the stone of the district is polished, and makes very handsome tops for tables. Other exhibits are of mosaic wood work. The manufacture of textile fabrics, as cloth and fancy woollen goods, is yet in its infancy here. Messrs. Anjos, Miranda, and Co., of Lisbon, and the Lordello factory of Oporto, make a good front, however, in these goods. In soap, Messrs. Castro Silva and Son of Oporto, show an abundant, if not choice, selection. The other goods exposed here are materials for printing and engraving, and hats, clothes, and boots without end. The Picture Gallery possesses a most extraordinary collection, and shows that the Portuguese are not blest with any great love for the achievements of artists in this department of fine art, and their success is extremely limited: mention of the very few passable paintings must be omitted; as the exhibitors doubtless consider them as meritorious, comparisons in this department would be especially odious. France also sends her contribution to the picture gallery; and England is personated by chromolithographs of the celebrated water sketches of the late John Leech. In photography the Portuguese are very good: the beautiful clearness of the atmosphere, and their careful manipulation, impart a tone to their pictures, which as regards their portion of the work does them infinite credit.

[*To be concluded in next week's Journal.*]

VALUABLE MINING PROCESSES IN AMERICA—No. I.

[FROM A CORRESPONDENT.]

We propose in this article to allude briefly to a few of the latest discoveries and inventions having for their object the successful mining and treatment of the various metalliferous ores; but to such only as are of the greatest practical utility, simply to indicate the principal and more important of them will suffice for our present purpose. Hereafter we may discuss them at greater length. The discovery of Nitro-Cotton deserves the first mention. Its value as an explosive cannot be over estimated. It is at once cheap, safe, and entirely applicable to blasting purposes. While its explosive power is far greater than that of gunpowder, its combustion is attended with no smoke whatever, while the smoke resulting from the use of gunpowder causes a loss of 30 per cent. of the time of the labourer. It has the further advantage of being non-explosive under concussion. This discovery was made in Europe, but the material is being manufactured in America on a large scale, where its use is coming into general favour.

An improvement of the first consequence in mining, now thoroughly established in America, though as yet unknown in England, consists in decomposing ores found in the form of sulphurets, known as pyrites. It does not admit of doubt that by far the greater quantity and the richest in quality of all ores containing the precious metals are found in this form. The utter impossibility of extracting by any process heretofore tried a remunerative percentage of the metals, without first breaking up the chemical union of those substances by some decomposing agency, is a fact equally well known. Processes of treatment which accomplish this desired result thoroughly, and which are at once cheap, simple in their application, and rapid in their results, have been found, and are secured to their discoverer by letters patent, both in America and in England. These processes are now in successful use in the lately-discovered mining regions of the former country. In accomplishing their work they do not stop at the point of simply eliminating the sulphur, arsenic, antimony, phosphorus, and other volatile ingredients so constantly present in these ores, but they reach to the point of full and complete oxydation of all the fixed base metals, as iron, lead, copper, &c., with which they are also found in mechanical and chemical combination, when the object desired is to obtain the gold and silver either by amalgamation or by smelting. This discovery is one of great importance, and will receive further notice in our columns at an early day.

A third great discovery, and one which seems to have been made nearly simultaneously in England and America, is the union of metallic sodium with mercury, the affinity of which latter for other metallic substances is thereby indefinitely, not to say infinitely, increased. The value of this discovery is no longer open to doubt; it is established beyond question, and enjoys the fullest confidence of all who have witnessed its operation. It is being largely introduced into the mining operations of America. The mercury thus prepared has received the name of "Magnetic Quicksilver," because of its powerful attraction for the particles of either gold or silver. This discovery cannot fail to take rank among the most useful of our time.

With the introduction of these discoveries, not to speak of improvements in machinery, as, for example, in apparatus for boring rock, and for reducing ores to a state of the finest comminution, a new era in the business of mining has been inaugurated, and it is, perhaps, not too much to say that mining must hereafter, at no distant day, take rank among the leading and controlling interests of the industrial and commercial world. While these and other useful discoveries and improvements were being made, regions of the earth heretofore unknown have been explored, and the existence of new and unlimited fields of mineral wealth has been demonstrated; the larger and richer of them are readily accessible, salubrious in climate, and generally fertile in soil. In a future number we propose to devote some space to such of them as seem to present the strongest claims to attention.

REPORT FROM SCOTLAND.

GLASGOW, APRIL 25.—At the time we wrote last week we were prepared for something "unusual" taking place, but the failure of Barned's bank did not produce results in this market equal to the expectations of those who were waiting for the event. During the week the business done in pig-iron warrants represents a sum exceeding 2,000,000*l.* sterling, and if the profits on the transactions reached 1*l.* per ton, not less than half-a-million of money must have passed out of the hands of the "bears" to adjust matters with the wily operators in Liverpool. At all events, the amount of business done was very great; and the failure above indicated—which was supposed as likely to bring relief to those groaning under the pressure of engagements which may yet bring them to the ground—only staggered the market for a day, which again became buoyant. No doubt, on Friday buyers at the opening were shy, and prices declined to 57*s.* 6d., but they rapidly advanced, and have since progressed, and now stand at 79*s.* 9d.; yesterday, however, 80*s.* was paid; and to-day, although the market was quiet, a moderate amount of business was done at from 79*s.* 6d. to 79*s.* 9d. cash. Middlesbro' iron, 58*s.* 6d. The week's shipments were 8860 tons, against 14,819 tons: total shipments, 163,412 tons; decrease, 32,003 tons.

Makers of Manufactured Iron of first quality are full of orders, at the nominal price of 8*l.*, and are busy shipping; but the second-class makers are next to idle, with their quotation at 7*l.* 17*s.* 6d. Some have quite suspended operations, and others are working a few hours a day, but the latter are working simply to keep their machinery in use, and to prevent their hands from leaving for other districts—as for profit, that is out of the question. The Mossend people are keeping their hands on a day's notice. It is thought that another month or six weeks will relieve the trade of the incubus, as by that time the great mass of the warrants will have reached maturity, and it will be difficult to prolong the game.

Coals are not getting into stock in any quantity, owing to the obstinate playing out of the colliers periodically, wherever they can safely venture to do it. They are, consequently, keeping up in price, and are higher than they have been for thirty years at the same season. There seems to be a combination not to permit the masters in Lanarkshire, and those parts of Renfrewshire near the city, from accumulating stocks, in order that they may be enabled to maintain the very high rate of wages now being paid them. Shipping orders are, consequently, going to the Fifeshire and Ayrshire ports which would have been taken up here. The exports from all the ports show an increase for the week ending yesterday, although of the quantity shipped only 10,650 tons were sent abroad, mostly to the Baltic ports. The shipments for the week were 23,395 tons, the same week last year 21,020 tons.

Mr. Cowan, the energetic and intelligent locomotive superintendent of the Great North of Scotland Railway, has applied to one of the engines on that line a new form of slide-valve, constructed on a principle which is believed to be one of the most remarkable discoveries of the day. The inventor is Mr. Thomas Adams, of Hopetown, near Edinburgh, who has been successful in perfecting a valve that is practically frictionless. The great discovery he has made is that, with two metal surfaces moving under steam-pressure, if the area on the back is properly proportioned to the area in contact, there is no friction between the metals, because a thin film of steam interposes, and that film is of the same pressure as the steam in the steam-chest. The valve made for Mr. Cowan is so proportioned as to work more easily when steam is on than when shut off, and is so arranged that the whole labour of getting up is done by machinery.

REPORT FROM NORTHUMBERLAND AND DURHAM.

APRIL 25.—The success of the COAL-CUTTING MACHINE at Netherton has quite revived the hopes of all parties interested here as to the ultimate result of this improved system of cutting coal. It may, therefore, be useful to give here some particulars as to the construction and mode of working of this very remarkable machine. The machine on this principle was first got to work at the Kippax Colliery, near Leeds, in the course of last year, and has been successfully worked since; the machine has been inspected by great numbers of mining engineers and others interested, and we subjoin particulars as to the *modus operandi*. The machine is worked by hydraulic power, which is produced in the following manner:—A steam-engine is placed at the bottom of the shaft, 120 yards from the surface, for the purpose of forcing the water from the mine to the surface, and this engine also produces the hydraulic pressure necessary to work the coal-cutting machine in the following manner:—The coal-cutting machine is placed at a distance of 600 yards from the steam-engine, and *to the rise*. The steam-engine referred to has one cylinder, 14 inches diameter and 27 inches stroke; attached to this engine are two double-action pumps, of 4½ inches diameter and 12 inches stroke; these are capable of maintaining a pressure of 360 lbs. per inch. These pumps force the water through 2-inch wrought-iron pipes to the coal-cutter. The machine working the coal-cutter is a self-acting hydraulic reciprocating engine, having a cylinder of 4½ inches diameter and 18 inches stroke, working horizontally, or at any angle to suit the inclination of the bed of coal, or at any height above the floor, or at the floor itself. The piston-rod is a hollow trunk or ram, into which is fitted a cutter-bar easily removed, carrying three or more cutting tools. The length of stroke of the tools can be varied, or any number of strokes can be given at any part of the stroke. The depth cut into the coal or shale, as required, can be varied from 2 feet up to 4 feet, the latter depth being quite sufficient for any practical purpose. The cutting action of the tools is a steady push or thrust, without any percussion. The same pressure which works the cutting engine also fixes the same to the roof, and also propels it forward as the process of cutting is completed, all the movements of the engine being self-acting. The machine, when working, makes 25 strokes per minute, and uses 40 gallons of water in the same time. We stated above that the water is conveyed from the steam-engine to the hydraulic-engine mainly by 2-inch pipes, but the pipes near the cutter are only 1½ inch, and the connection from these iron pipes to the engine itself is made by an India-rubber tube of the same size; this, of course, allows the engine to traverse the length of the face required.

The exhausted, or waste water, is conveyed away from the machine by 2½-in. india-rubber hose, and by 2-in. ordinary gas-pipes; and, of course, the water may be used over and over again, as in the ordinary hydraulic press. The average rate of cutting during several trials of this machine was 10 yards in the face per hour, and the minimum rate, under favourable conditions, 13 yards; and as the depth cut is 3 feet 3 in., the work performed may be safely put down as equal to that of from fifteen to twenty first-class men. The machine at work at Netherton is in every respect similar to the Kippax machine described above, the only difference being in the arrangements to suit the particular locality, which are not essential.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

APRIL 26.—The Iron Trade remains rather quiet, but a continuous demand keeps most of the works fairly employed, and, considering the heavy failures which have checked the progress of new enterprises, and the unsettled state of affairs in the United States, the demand cannot be considered unsatisfactory.

Mr. Davis, the stipendiary magistrate in the Potteries, has inflicted a justly severe sentence for a most serious offence. At the Tunstall Police Court, to-day, James Spilsbury, a lad of 16 or 17 years of age, was charged under the 38th Special Colliery Rule, with unlawfully opening and uncovering his lamp, thereby endangering the safety of the miners, in a pit at the Hamill and Bycars Colliery. The defendant admitted the charge. Mr. Harding appeared in support of the information, and said that the defendant had, in reality, been guilty of two offences, and that his conduct had been of the most flagrant character. Wm. Bennett, one of the workmen, explained that the defendant was employed in the works in drawing dirt from one place to another, and all were bound to work with lamps, and lamps alone. On April 13 he found him with the top of his lamp off, and a pipe in his mouth. Bennett said to him, "Jem, this is not a proper place to smoke; we shall be burnt to death," and threatened to tell Frank, the butty, or Mr. Gater, the manager, when he impudently said that "he did not care a d— for him, Frank, or Mr. Gater. They did not find him with tobacco, and he should smoke when and where he liked." The witness closed his explanation by stating that the defendant had endangered the lives of twenty men.—Mr. Harding suggested that the case was one which merited a severe punishment; not a mere fine, but a direct committal to prison. Mr. Davis and Mr. Meir, before whom the case was heard, considering that a serious offence had been committed, the defendant was committed to hard labour in the House of Correction for two months. Mr. Wynne, the Government Inspector of Mines, attended the enquiry.

The question of the extension of the Factories Acts to the iron and hardware trades is exciting increased interest, though there is now no ground for expecting that any steps will be taken in the matter this session. The Wolverhampton Chamber of Commerce, some time ago, appointed a sub-committee upon the proposed application of the Factory Act to this district. At a recent meeting, at which the report of this sub-committee was read, Mr. Lees moved, and Mr. Gibbs seconded,—"That the passing of an Act respecting the employment and education of children be approved, but that the several proposals of the commissioners require separate and distinct consideration." This was carried unanimously, as were also the following propositions:—"That no child under 10 years of age should be employed;" and "that children between 10 and 13 years of age should not be employed for more than half a day, and should be required to bring a certificate of attendance at school the other half." Mr. Lees then moved, and Mr. Perry seconded,—"That there is no necessity for the interference of Government with the hours during which young persons between 13 and 18 years of age and women are employed;" upon which, Mr. Gibbs proposed, as an amendment, which Mr. Moreton seconded,—"That the hours during which young persons and women may be employed should not be longer than from seven to seven, with the proposed time allowed for meals." The original motion was, however, carried by a majority of one vote. The following resolutions were also adopted:—Moved by Mr. Gibbs, and seconded by Mr. Lees,—"That the limitation of age at which young persons may be employed in night sets should not be above 14." Proposed by Mr. Lees, and seconded by Mr. Moreton,—"That no such Act (as the Factory Act) should be introduced, unless it be applied to all places in the United Kingdom in which trades of the same kind are carried on;" and "that it should be distinctly understood that all workshops, however small, in which the affected trades are carried on must be considered factories." The last resolution is most important. It is in the smallest workshops that the greatest evils prevail, and, however difficult it may be to deal with them, Government must grapple with these cases if they interfere at all.

At the Rushall Police Court, on Monday, Mr. Samuel Checkley, coal-master, pleaded guilty to having omitted to give notice of an explosion at his pit on Dec. 28, and also with having allowed the ventilation in his pit to become defective. The inspector, Mr. Baker, preferred the complaint. A fine of 1*l.* and costs was imposed for each offence, making 6*l.* 2*s.* 6d. altogether.

At the Sedgley Police Court, on Monday, before Mr. I. Spooner, stipendiary magistrate, Mr. Baker charged Benjamin Raybold, a chartermaster, engaged at the Moorelane Colliery, Kingswinford, with a breach of the Colliery Rules, by neglecting to supply timber at a portion of a pit in the above colliery, where, it was stated, a man was killed on Dec. 14. It was shown by defendant's solicitor that there was a good supply of timber, and that the fatal accident had arisen from the workmen's own neglect in not placing it under the dangerous part where the accident occurred, and the case was dismissed.—John Stevenson, of Tilehouse Colliery, was charged by Mr. Baker with a breach of the Colliery Rules. This case was also dismissed.

DERBYSHIRE, YORKSHIRE, AND LANCASHIRE.

APRIL 26.—There is very little alteration to be noted in the state of the Iron and Coal Trades in either the Midland or what may be termed the semi-northern districts of England. In the neighbourhood of Chesterfield and Staveley business for the season has scarcely ever been better, coal and iron being in great demand from both places. Pipes, rails, and bars were scarcely ever in better request; and at no period has the Staveley Company been doing a better trade than at present. The Midland Company are carrying a large tonnage southwards, which in a very few months will be considerably augmented by the new collieries which will shortly be brought into full working operation. At Clay Cross one of the great drawbacks is the want of house accommodation for the workpeople, but efforts are being made by the company to provide for their workpeople proceeding northwards. At Sheffield the trade to America is not by any means so brisk as it has been, still manufacturers of steel have nothing to complain of, as orders are coming to hand to such an extent as to ensure full employment for all the men at present employed. In the works engaged in making heavy armour-plates and steel rails business is remarkably brisk, not only for the home Government, but for exportation. Indeed, orders from foreign states have of late been very large, showing that the reputation of our manufacturers of plates is recognised and appreciated in a very high degree. At Milton and Elsecar business is resuming its wonted appearance. At the last-named place the puddlers, who had been out for nearly two months, resumed work on Monday. The dispute was not one of wages, but related entirely to the quality of the iron, the mixing of which, of late, required more time in manipulating than what the men had previously been working. At the extensive works on the Trent there is the greatest activity displayed, and the North Lincolnshire Company have just completed a new blast-furnace, whilst several of the other companies in the same ironstone field are extending their works to such an extent that the barren and uninhabited waste of some three or four years ago promises to rise into a place of no small importance, and to become a second Middlesbro'. This will be more apparent when it is stated that the ironstone in the district is far superior to any that is to be found in any part of Yorkshire or Derbyshire, to all parts of which the ironstone is largely exported. Another advantage by which the locality will be benefited is the opening of the Trent and Auckolme Railway, which is now completed and passed by the Government Inspector, and which will be opened this week. By it the Frodingham, as well as the other iron-making works, will have the advantage of direct communication not only with the South Yorkshire coal district, but with the Great Northern and other direct lines, extending to all parts of the kingdom. There is a good business being done at most of the ironworks in South Yorkshire; whilst large quantities of steel are being turned out at Penistone by the Bessemer process. At the last-named place extensive alterations and additions are being made, and the company (Cammell and Co., Limited), are appreciating the advantage of having their works in a locality which commands all the desiderata required in the trade—coal, ironstone, and railway facilities to all parts of the country.

The Coal Trade in South Yorkshire still continues brisk, the demand for steam coal in particular being very active; so much so, indeed, that there is every probability of an increase in the present prices. House coal is in fair demand, but, as usual at this season of the year, several of the masters have been obliged to submit to a reduction to effect sales. The business doing in steam coal is good, and a large tonnage is being sent to Hull and Grimsby for exportation to the North of Europe, as well as for local consumption.

A meeting of the South Yorkshire Coalmasters' Association was held on Tuesday last, at the King's Head Hotel, Barnsley, when amongst the matters discussed was the necessity of advancing the present prices of steam coal, as several of the masters have been obliged to submit to a reduction of nearly 1*s.* per ton for house coal. Several of the members considered that an advance of 1*s.* per ton on "hard" might safely be demanded in the present state of the trade, so as to counterbalance the loss on the "soft." No decision, however, was come to on the matter, but there can be no doubt that with the present demand prices will be advanced. At the same meeting it was agreed that the association should in every way support the Messrs. Newton, Chambers, and Co., whose men had been out for the last three months, having refused the increase offered by the firm. Amongst the strikes so general in the North of England, a fresh one took place this week to be added to the list. The colliers at the Blacker Main Colliery, near Barnsley, left work on Monday, because one or two men refused to contribute their share towards the payment of the workmen's weigher.

At Manchester, Bolton, and Wigan there is a fair demand for coal, the works being kept fully going. At the various iron establishments business is active, whilst the machine and engine shops in all parts of the county are well supplied with orders. At Liverpool, where the exports for some weeks past have been very small, there is a considerable improvement. Welsh bars fully maintain their prices, the tendency, if anything, being upwards; and there is every probability that our exports to America and the Continent will considerably increase as the season advances.

REPORT FROM MONMOUTH AND SOUTH WALES.

APRIL 26.—The Iron Trade has been somewhat quiet since last week's report, and there is very little change to note. It was believed eight or ten days ago that the home demand was about taking a decided turn for the better, but the subsequent bank failure at Liverpool, and the increased distrust it engendered in commercial circles, checked the market; still a slightly better feeling prevails. For bars, especially, there is an improved enquiry, and, as compared with quarter-day, prices are firmer. The home orders for railway iron are not numerous, and the requirements of plate buyers are comparatively limited. In the foreign trade there are two or three items of encouragement to record, which confirm the opinion expressed in previous reports, that orders will come in more freely as the season advances. It is announced that contracts to the extent of about 11,000 tons of railway iron are to be placed in this country for the Southern States of America, and whether South Wales secures any part of them or not, it is clear that all the iron-producing districts will, to some extent, be benefited. From Canada additional specifications have arrived, and Russia is an earlier purchaser than usual for certain descriptions. All these facts prove that the future of the trade is by no means discouraging. Pig-iron continues in excellent demand, and, in fact, it is a general complaint that the supply is not equal to the requirements of the mills and forges. Tin-Plates are a shade easier, and buyers are not so ready in giving makers' quotations. Whether the demand has really slackened a few weeks will, no doubt, prove. Steam Coal is in brisk demand, and the collieries are better employed than for a long time. There is no lack of orders on merchants' books, the enquiry from both the foreign and home markets being remarkably good. The Great Western Company are taking coal from Aberdare to Birkenhead for 6*s.* a ton in freighters' wagons, and their rate to Newport, *via* Pontypool-road, is just the same as the Taff Vale to Cardiff. House coal proprietors are doing a moderate coasting business, and the local consumption continues limited.

The firm of Shackleford, Ford, and Co., railway carriage and wagon builders, of Cheltenham and Swansea, are about to transfer their works and business to a limited liability company, under the title of "Shackleford, Ford, and Co. (Limited)." The proposed capital is 200,000*l.* in 20,000 shares of 10*l.* each, and the members of the firm take 6000 of the shares, and will be the managing directors. The firm have for years been the builders for the Bristol and South Wales Wagon Company (Limited), and several of the directors of the latter are on the board of the new company, Mr. Handel Cossham being the Chairman.

An appeal case of some importance to this district was heard, on Friday last, in the Court of Chancery, before the Lord Chancellor and the Lords Justices, in which Mr. Davis, the plaintiff, is lessee of certain mining rights on land belonging to Mr. E. M. Taskeville, Sir L. Glyn, and Mr. W. R. King; and Mr. Shepherd and others, the defendants, are lessees of land adjoining, and the mining rights held under lease from the same lessors. The bill was filed against the defendants to restrain them from working a vein of coal, which plaintiff alleged they were doing, beyond the boundary line dividing their respective rights. The question turned upon the position and direction of this boundary line, and the Vice-Chancellor granted an injunction, from which decision the defendants appealed. The bill also asked for an account of the minerals taken, and payment of the value to the plaintiff. The Lord Chancellor, in giving judgment, said the Court differed from the Vice-Chancellor that the plaintiff was in possession of the mine eastward of the "fault." He was of opinion that the plaintiff was in possession of all which the lessor intended to grant, but not necessarily in possession of that which the lessor did not grant. If an injunction were granted the owner might be restrained from working in his own ground. The order of the Vice-Chancellor would, therefore, be reversed, and the bill dismissed with costs.

The Newport Alexandra Docks, it is confidently stated, will be commenced forthwith. Mr. Carlyle, the solicitor to the company, has resigned, and the board of directors have elected Messrs. Maynard and Son, of London, to the appointment.

Last week a reference case from the Superior Courts was heard at the Sheriff's Court, Newport, in which the representatives of the late Mr. C. Prothero sought to recover 2064*l.* from the Sirhowy Railway Company, for damages alleged to have been sustained, as lessees of coal lands with surface rights contiguous to the defendants' line to certain minerals, owing to the construction of the said line of railway. The proceedings lasted a couple of days. Mr. Henry Matthews appeared for the plaintiffs, and Mr. Lloyd, Q.C., for the defendants. It was alleged, among other things, on the part of the plaintiffs, that originally they had free access to a tramroad for conveying away their minerals, but they had been deprived of the advantages of the old Sirhowy tramway on account of the present railway having been constructed, the access to which was not so convenient for their property. The points left to the jury were—1. Injury done to right of making deposits of rubbish and spoil banks, and of erecting forges, smithies, and other erections, as shall be thought necessary on the site of the railway.—2. Injury done to right of digging and searching for coal, and making pits, shafts, and levels.—3. Injury to right of making railroads, tramroads, and wheelroads; and ingress, egress, and regress with carts, &c., for hauling and carrying away the coal. The jury found for the plaintiffs on the first point, damages 174*l.* 12*s.*; and for the plaintiff on the second point, damages 500*l.*; but on the third point they found for the defendants.

The emigration mania, noticed a fortnight since in the *Mining Journal* as largely existing in the Aberdare and Rhondda districts, has extended itself to Monmouthshire, and large numbers are leaving for America. Surely the following extracts from a letter received from a collier (Benjamin Raynold), located at Pittsburgh, ought to open their eyes to the folly they are bent upon committing:—"If we get money it takes it all to live, for it costs 50*c.* for a breakfast, and 30*c.* for a bed. So as soon as I get the money I shall come back to you, for it is no go here at all."—"It is a pity for people not to tell the truth about a place, and stop others from coming from their homes."

The views expressed in last week's Journal, as to the absence of any necessity for the outcry about the exhaustion of our coal fields, is confirmed to a remarkable degree by the letter of "A Coalowner," wherein he observes that "the idea of our coal supply running short for the next 100 years, even doubling the present rate of consumption, is simply ridiculous. There are thousands of acres in the centre of the South Wales basin as yet untouched. I myself have, on my own property, which has not yet been touched, a sufficient quantity to keep the port of Cardiff going at its present rate of shipment for more than thirty years to come. The steam coal trade is at present a vast monopoly, and parties are clearing their tens of thousands per annum, even allowing the small sum of 1*s.* per ton profit. It is the object of these parties to frighten the consumer."

SOUTH WALES INSTITUTE OF ENGINEERS.

The general meeting of the members of the Institute was held on Wednesday, at the Castle Hotel, Merthyr,—Mr. G. MARTIN, of Dowlais, President. Among the members present we noticed Mr. W. Adams, Cardiff; Mr. A. Bassett, C.E., Cardiff; Mr. R. Bedlington, Rhymney; Mr. E. Brigden, Dowlais; Mr. James Brogden, Tondu; Mr. Lionel Brough, Her Majesty's Inspector of Mines, Bristol; Mr. G. Brown, Mountain Ash; Mr. T. F. Brown, Coleford; Mr. E. J. Edwards, Crumlin; Mr. T. W. Lewis, Plymouth Works; Mr. H. M. Maynard, Bedwas; Mr. W. Menelaus, Dowlais; Mr. H. Trump, Rhymney; Mr. M. Truran, Dowlais; Mr. W. Williams, Merthyr Tydvil, &c. Mr. W. Toppin, C.E., Bristol, was elected a member.

The PRESIDENT said,—Gentlemen: It is with great pleasure I rise to thank you for the honour you conferred upon me at your last meeting in electing me President of the South Wales Institute of Engineers. I regret exceedingly being unable to attend the last Newport meeting, but illness alone prevented my being present. I have always endeavoured to promote the interests of the South Wales Institute of Engineers, and with

your aid and support I flatter myself I shall be able to pull through the duties which will devolve upon me. Gentlemen, I thank you. (Applause.)

Mr. BRIGDEN (the secretary) then read the minutes of the last meeting.

The first paper introduced for discussion was the following, which was read at the Newport meeting:—

THE LEINSTER COAL FIELD.

BY MR. J. M. MEADOWS.

The writer, in noticing the leading geological features of the country intervening between the Leinster coal formation and the Irish Sea, says the Leinster coal district occupies the northern end of a series of coal measures, forming ridges of undulating hills, varying from 800 to 1000 ft. above the level of the sea, and running, in a north-east and south-west direction, through parts of the Queen's County, County Kilkenny, and County Tipperary, for a distance of about 40 miles. The average width in the Leinster, or northern, portion is about 12 miles, and in the southern portion about 5 miles. The entire formation rests immediately on the mountain limestone, by which it is surrounded on every side. The extreme southern portion forms the Slievardagh, or Tipperary coal field. The seams met with in this coal field consist of anthracite coal and culm, varying in thickness from 16 in. to 4 ft., and of different degrees of quality and hardness. These seams are, however, so placed, and otherwise affected by faults, as to render their classification, as a whole, a matter of difficulty, increased still more by the absence of sufficiently comprehensive explorations to prove certain portions of the field. Although two important national geological surveys of the district have been made, yet the actual number of the seams, from difficulties of identification, is still rather a matter of conjecture than otherwise. The lowest workable seam of the district, however, is well proved, and has been extensively wrought. It has a thickness varying from 16 in. to 20 in., and is met with about 500 yards over the limestone. The underlying measures consist mainly of hard sandstone grits and flagstones, with a great preponderance of shales, interstratified with thin bands of clay ironstone, and having two thin seams of coal of unworkable thickness, both being less than 12 in. thick. Advancing into the interior, in the line of dip of the first workable seam, for a distance of one or two miles, we find a seam (or rather its place, as it is all now practically exhausted) which was 3 ft. thick, and which—at one time extending over a considerable area in the interior—mainly formed the so-called Kilkenny coal, for more than 150 years the staple coal of the locality. This seam is by some said to represent the first workable seam of the exterior. In certain portions of the interior, where the 3-ft. seam did not exist, but almost in juxta-position with it, a 4-ft. seam, of an entirely different class—anthracite—is met with, for the most part of a hard, massive, rock-like character, breaking into irregular sharp-edged pieces, and most unlike anything but itself in the district. This seam is so difficult to work that the colliers receive as much as 6s. 6d. per ton for the hewing alone; all other charges are borne by the proprietors, who, however, receive in addition, free of charge for hewing, the small broken coal and inferior bottom portions met with in the working. There are at present some detached workings on this seam; but, for the credit of the district, the writer regrets to say that, notwithstanding the many years mining works have been carried on there, no work has been effectively directed to ascertain if this seam is one lower in the series that the 3-ft. seam, or what its place is. This question is not without an important bearing on the future of the district; and when it is considered that the 3-ft. seam of the interior lies in parts so close to the surface as to be mined by open-cast, and extended over a large area at so low an angle as to be reached, for the greater part, by pits less than 50 yards deep, it is to be regretted that no sinking was ever carried down through the measures under the 3-ft. seam to prove the lower beds. There were some borings, but not with such sufficiently reliable results as to be decisive on so important a matter. The system of working originally adopted, and afterwards persevered in, was that of numbers of small pits within short distances of each other, in most cases sub-let by the proprietors to the working colliers, with no adequate supervision, and in the multitude of these small interests, in the hands of persons for the most part with little or no practical mining knowledge, a comprehensive view of the district was entirely lost sight of; in fact, such was incompatible with the system that prevailed, and much that should have had a national value was turned to but poor account. It was a system that bestowed no thought upon the future, and to-day a section through the field is as much a problem as it was years ago.

Such are the prominent features of the district, and I now return to the place of the first workable seam, as a geological horizon for those who, like the writer, may work upwards from the limestone for purposes of comparison. It occurred to the writer, on a visit to the Pembrokeshire coal field, where we find the coal formation first developed after crossing the Irish Channel, to contrast the two formations. The general features have much in common with a marked similarity in some of the lower seams. The writer does not profess any but a very cursory acquaintance with the district; but, with the aid of the geological section from Tenby through Saundersfoot, we find at the northern end, where the measures are most regular, a marked feature in the thickness of the measures that lie between the first workable seam there and the limestone. Assuming, as the writer thinks he does with reason, that the Kilgetty seam, in Pembrokeshire, represents the first workable seam in the Irish district, we have the thickness of the interposed measures—in the former case about 400 yards, and in the latter about 500 yards. It is rather with a view to this special feature than any other that the writer has addressed himself to the subject, and it only remains for him to claim your indulgence for what he fears must be a very inadequate treatment of its details. Before closing, he would remark that the continuity at one time of the Irish coal formation is further traceable to the extreme West of Ireland. In a due west direction from the district now noticed, at distances varying from 50 to 70 miles, we again meet the same coal formation in parts of the counties of Cork, Kerry, Limerick, and Clare, spreading over a wide area, and forming the Atlantic coast line there for a considerable distance; but, unfortunately for home resources, mainly consisting of the lower beds, with but a very spare development of workable anthracite seams.

The CHAIRMAN said Mr. Meadows was not present, but perhaps there was some gentleman in the room who would like to make a few observations on the subject.

No gentleman responding to the Chairman's call, the meeting proceeded to discuss the second paper set down in the programme:—

ON UNDERGROUND HAULAGE, PARTICULARLY WITH REFERENCE TO ENDLESS AND TAIL ROPES.

BY MR. GEORGE FOWLER.

The writer observed that as shallow coal seams become exhausted and deeper ones are worked, it becomes a question of importance to increase the area of coal to be got from any one shaft or pair of shafts. As a matter of possibility (excluding the question of ventilation) this is simple enough, but by no means so simple in a commercial point of view. The only thing to be done is to apply self-acting inclines and steam power, and the question arises as to the best way of doing this. By far the most simple case, and one in which the economy of steam power favourably contrasts with horse haulage, is when coals have to be drawn up an incline plane to the working shaft. Nothing is necessary but to put an engine at the top of and conveniently near to it. The engine draws the full tubs up, and the empty wagons take the rope out again with them. If the coal be level, or so slightly inclined that an empty train of tubs will not draw the rope down with them, it becomes a question whether to work with an endless rope driven by the friction of grooved wheels, or to use what is commonly called a tail rope—that is, a rope wrapped on a second drum and taken round a turn-wheel at the end of the level, and attached to the inbye end of the train. Both methods have their advantages and disadvantages, and it is, perhaps, impossible to say decisively which is the best and most economical. A tail rope is merely the addition of a second rope and drum to a simple inclined plane engine, in cases in which the empty wagons will not draw out the rope. The rope from this drum is carried along the road to the end, when it is passed round a large wheel and hooked on to the full train. In drawing out the train the tail drum is thrown out of gear, and allowed to give out its rope. When the full wagons are drawn in the main drum is thrown out of gear and the tail drum thrown in, and the empties and the main rope are thus drawn back again. In erecting machinery of this description, one of the first questions to decide is the speed at which it is best for the corves to travel. When the coals are large and loaded with garlands the speed should not be greater than four miles an hour; if garlands are not used six miles an hour may be the speed; but with high-sized tubs, over which coals do not project, eight or nine miles an hour, or even faster, may be run. Round curves in the road are fixed upright rollers, to prevent the rope from rubbing on the side of the road; these, with tail ropes, are better outside the rails, so that they may be of good size. On all parts of the road sufficient horizontal pullies should be laid, to prevent the rope from chafing on the floor. The number of wagons to be drawn vary with the length of the road, the speed, and the load. A quick speed and a light load probably pays the best, if the corves can be made to keep the rails.

The writer then referred to a drawing which accompanied the paper, for a pair of engines to work 2000 yards of level road. Instead of two second-motion shafts and drums, both drums were small, and run loose on the main shaft of the engine, being alternately connected and disconnected with a clutch. The drums were made of cast-iron and turned up, little blocks of steel being let into the bushes, to take the friction on the shaft. In such an arrangement steel ropes would be necessary, on account of the small size of the drums. By using a second-motion shaft two more drums might be driven by the same engine. The following is an estimate of the cost of drawing 500 tons a day 2000 yards, with tail ropes; the price put down for the engine and boiler house is necessarily rough, as the cost would vary much at every colliery:—One pair of 15-horse engines, with drums, three boilers, fittings, engine and boiler house, foundation, rollers, turn wheels, &c.—say, 2500*l.*, which, at 15*l.* per cent., amounts to 375*l.* per annum. Taking the quantity of coals drawn at 500 tons, and the number of working days at 250 in the year $\frac{250}{375}=1\frac{1}{2}=30$ s. $\frac{30+12+4}{500}=\frac{3}{4}$d. per ton interest and redemption of capital and repairs to plant; 6000 yards of 2½ steel rope=8 tons, which at 65s. amounts to 520*l.* Assuming the rope to last two years, the cost would be 1*d.* per day, or ¼d. per ton. Labour, including engineman, stoker, trimmen, grease boy, road cleaner—say, 30s. per day, or ¾d. per ton. Fuel, oil, repairs to wagons, &c.—say 2*l.* per day, or 1d. per ton.—Total, 3d. per ton. On the old plan of horse haulage, if the road be level, the cost would be something like 8d. per ton, but it was possible for inequalities to double the horse power required. An endless rope is passed two or three times round grooved frictional driving wheels, carried to the end of the plane round a turn-wheel and back again to the engine, where the two ends are joined. The writer illustrated the method of giving motion to the rope by a drawing. There were two shafts, besides the main shaft of the engine; on one of these, driven by the engine, was keyed a three-grooved wheel; and on the other, an independent shaft, were two single-grooved wheels. One of these was keyed to the shaft, the other run loose upon it. The rope is first passed half round one groove of the driving wheel, then round one of the loose wheels and back again to the driving wheel, then round the other loose wheel and back again to the driving wheel, and then conducted along the roadway; in fact, the rope is passed around the wheels much in the same way that a cord is reeved upon blocks. The rope may be passed round the wheels, either like the figure 8, or like double ⊂⊃. The figure of 8 gives rather more bite; but as it bends the rope backwards and forwards it will probably sooner wear it out. The carriages for the second wheel are allowed to slide upon the foundation plates, to allow for irregularities in the length of the rope, so that it may always be made to bite upon the driving wheel. The tighting wheel is sometimes drawn back by screws, but by far the better plan is a balance weight, which allows the strain on the rope to be put to the lowest point, and gives a certain measure of the goodness or badness of the working order of the whole machine. If the rope should catch under a pulley the balance weight will lift and allow the rope to surge, and so reduce the chance of breaking the rope. An endless rope required a double roadway, the inbye rope being taken along one road and the outbye rope along the other, one road thus serving for empty and the other for full corves. The rope must be kept within, but not necessarily in, the middle of the road; indeed, round curves it is better to keep it to the outer rail, so that large curve rollers may be used. It will be found most economical to use curve rollers when necessary without stint, so as to minimise the angle of curviture at each roller. If economy be very much considered, there is no reason why old corve wheels should not be used for this purpose. On the straight road it will be found advisable to keep the rope from chafing by using plain barrel rollers. The trains are attached to the rope by clip tongs, with a chain. The tongs are made 4 or 5 in. long in the jaw, so that they may not cut the rope, and they are fastened by a link at the top. The handles are best made of steel, as they are lighter, and less likely to take a set. The advantages and disadvantages of each may be summarised as follows:—The tail rope is cheaper in first cost, and requires fewer men to work it than the endless rope. In the matter of cost, so far as machinery goes, the difference will not be more than 100*l.* in the two extra shafts and balance levers. A longer engine-house is required, and the foundations are slightly more expensive. The tail rope requires only a single line of rails, while the endless rope must have a double road, which for a plane of 2000 yards would involve a difference in capital account of 1500*l.*; but then there is only half the wear upon them. With the endless rope a bent rail is a novelty, and providing there is no heaving in the floor the road scarcely ever requires to be touched. In cases where the roof is bad, or where it is expensive to make a wide road, the endless rope is entirely out of the question. In the matter of flexibility, or easy adaptation to all sorts of places, the tail rope has the advantage, whereas with the endless rope, if the road be not nearly level, it is entirely out of the question. It must not be forgotten that it is easy to put main and tail drums to an endless rope engine, and a combination of the two will often work well in practice. In labour the tail rope has also slightly the advantage, as there would be four or five trains on the road at one time instead of one. In the wear and tear of ropes it is not easy to strike a balance. The total strain, load for load, is greater with an endless than with a tail rope, because, besides the weight of the load, a certain strain must be put upon the rope to give bite. This, however, is small; 4 cwts. of balance should be sufficient, which is not more than ¾ cwt. on the rope. The act of driving must also wear the rope, as there must be a slight slip in the wheels. Endless ropes can, however, be more thoroughly worn out than tail ropes, and if a rope breaks, or a wagon gets off the rails, no accident can happen. All these reasons for and against makes it extremely difficult to say positively that one plan is better than the other. It is a question which should be decided when the requirements, position, and peculiarities of any colliery at which it is desirable to try one or other are fully known, and can be fully considered. For the economical introduction of machinery for hauling, too much stress cannot be laid on the importance of pre-arrangement. For working with tail ropes, straightness is of more importance than levelness. The position of the engine will, of course, vary with the requirements of the colliery; usually, at or near the pit bottom is the best place, and the boiler can either be fixed in the pit, or the steam taken down from the surface. An engine should never be fixed on the surface for more than a single rope. In some collieries, where danger from fire is small, self-contained engines and boilers can be easily fixed up where convenient, and the smoke and waste steam taken in fire-clay pipes in the return air-way. Compressed air engines may be worked in this way, but there is considerable waste of power from the friction in the pipes, and from the heat arising from compression.

The CHAIRMAN said he had received a letter from Mr. Fowler, saying he was unable to attend, on account of a pressing engagement. Perhaps it would be best to adjourn the discussion till the next meeting, as he understood Mr. Bates had a paper on "Tail Ropes," which he had consented to put off. If they adjourned the discussion the papers could be taken together.——Mr. MENELAUS thought as there was Mr. Bates's paper it would be better to keep the discussion, but that would not prevent their offering any observations at the present meeting; besides, they had plenty of time.——The PRESIDENT said he was entirely in the hands of the meeting.

Mr. MENELAUS thought that as the subject was an important one to the district the best plan would be to go on with the discussion on Mr. Fowler's paper, and leave it open till the next meeting, when Mr. Bates's paper would be read. They could then follow up the discussion, or take both papers together.——Mr. L. BROUGH thought that plan would be best. The President had been good enough to inform them that the next meeting would be opened with Mr. Bates's paper, so that there would be every facility for discussing both.

Mr. MENELAUS observed what he had to say would be very short. It was a most important subject, and he thought it would be of great advantage to the Institute if they could get some reliable information on clip drums or pulleys, which he thought would be in a very many places a very great improvement on drums and self-acting inclines. He hoped someone would write a paper on the subject. If the writer of the paper was right in his statement, that the wear of the rope was less than on the drum, and that there was no slipping, it was evident that shieve pulleys would be a great improvement over the wheel drum. It would be cheaper, and there was less friction. He hoped someone would write a paper on clip drums, in connection with Mr. Bates's paper on tail ropes.——Mr. L. BROUGH suggested that the paper should be accompanied by a sketch or two.——Mr. MENELAUS said what he wanted to know was whether it would be applicable to self-acting inclines. They could not work such inclines with any great weight with a plain shieve. The writer did not wish to introduce the clip pulley for hauling; it was simply for working an endless rope on self-acting inclines. It was applicable to agricultural purposes, and he did not see why it should not be applicable to mining purposes as well.

After some further conversation, Mr. BROUGH asked Mr. Cope Pearce, of Cyfarthfa, if he would be so kind as to write a short paper, with one drawing.——Mr. PEARSON said the principle and construction were well understood, but he did not know where to get one.

Mr. T. F. BROWN said the main point to ascertain was whether the rope would last longer.——Mr. MENELAUS: The writer of the paper says the rope will last much longer.——Mr. BROGDEN said he might mention that he was about putting one down, and he should be glad for any gentleman to come and see it at any time. It would be at work in about a fortnight.——A MEMBER said that Mr. Armstrong recommended the clip pulley for long ropes.——Mr. BROGDEN, in reply to a question, said the pulley would be applied for pumping purposes.——Mr. T. H. HOSGOOD said he found that in frosty weather the rope slipped very much in the morning, and they had to apply sand.——A MEMBER: What rope is it?——Mr. J. SMITH replied that it was a wire rope.——The PRESIDENT: What is the incline?——Mr. HOSGOOD: From 4 to 5½, 1100 yards long.

After some further conversation, the SECRETARY proceeded to read an interesting paper on "Improved Blooming Rolls," by Mr. C. While, who illustrated his principle by means of a couple of well-executed model machines, showing the difference between the old and the new process.——Mr. MENELAUS said he had a very high opinion of Mr. While's machine for blooming rolls, particularly with regard to the saving of labour. He had no doubt, from the experience he had of it at the Taff Vale and at Ebbw Vale, that it was a very great improvement. One of the merits of the machine was that they could put an enormous quantity of work on the piles, and it would be as well if the inventor would say whether there could not be put as much on two grooves as was generally put on three.——Mr. WHILE replied in the affirmative, and added that he could reduce a pile from 9 inches square to 6 inches.

Mr. MENELAUS said he had taken some interest in the machine, and was anxious for it to be brought out. If Mr. While could reduce a rail pile from 9 in. square to 6 in., and two grooves, he thought that was as much as they could expect.——Mr. TRUMP said Mr. While had proved it, although to them it might appear strange. There was no doubt that in most rod-mills the machine would be most valuable.——Mr. MENELAUS said it was designed for that class of work.——Mr. HOSGOOD said they had two of the machines, which worked admirably, and he was sure the bloom was far better and more solid than by the old bloomer. Last week they turned out 103, 104, and 105 tons.——Mr. WHILE, in reply to a question put by Mr. Edwards, said it required about the same amount of power as the old bloomer to effect the reduction he had mentioned.

Mr. HOSGOOD: It requires much less power.—Mr. MENELAUS: We have it that 103, 104, and 105 tons of rails are regularly produced by this machine. I suppose it would do double?——Mr. WHILE: Three times the quantity.——Mr. MENELAUS observed that the benefits were—it would enable them to do a large amount of work, few repairs were required, and it effected economy in labour. The machine dispensed with two high-priced men every 112 hours—that was four men at, perhaps, 2*l.* a week. That alone was a great saving. It could make 100 tons of rails at less expense, and with a saving of labour, than the old bloomer. One great merit of the machine was that it would do four times the amount of work than the old machine.

Mr. TRUMP: If the mill turned out anything like a quantity of rails the saving would be 9*l.* a week in labour alone.

In reply to a question, Mr. WHILE said a boy was required to cut the clamps off. He also said that they saved 500*l.* a year by his machine, without taking coal into consideration.——Mr. MAYNARD: What would be the difference in the cost of the two machines?——Mr. WHILE: I should think not more than 100*l.*——Mr. HOSGOOD: The difference would be from 180*l.* to 200*l.*

Mr. MENELAUS: I believe it is an admirable machine, and very well suited for blooming steel, and we intend to apply it at Dowlais, where dealers wish the rails bloomed instead of hammered.

On the proposition of the PRESIDENT, a cordial vote of thanks was passed to Mr. While for his paper.

The SECRETARY next read a paper "On the Relative Merits of the North of England and South Wales System of Coal Mining, with Reference to Loss of Life," by Mr. G. Brown. The paper was a very long one, and was warmly received. The writer advocated the North of England system, and illustrated his opinion by the following Table:—

1865.	North of England.	South Wales.	Lives lost in the North of England.	Lives lost in South Wales.
No. of persons employed in coal mining. Per life lost ..	451	277	1	1
Tons of coal raised for every life lost	157,245	66,171	1	1
Explosions of gas, causing loss of life.....	7	4	16	6
Accidents from falls of coal	17	12	17	12
" " stone	70	53	70	54
" " in shafts	39	5	40	6
Miscellaneous accidents underground.....	38	18	38	18
" on surface	26	8	32	8
Total of accidents.....	197	101	213	105
Proportion of lives lost at pits at work	774	332	0·03	0·03
Number of men employed in coal mining	92,038	29,076		
Average number of men employed in each pit.....	130·70	87·57		
Number of tons of coal raised	33,291,541	6,948,000		
Average quantity of coal per man	362·80	238·96		
" " raised per each pit per year....	43,014	20,928		
" " " per day 266 working days	167·48	80·10		
No. of working places opening long work, 16 yards wide.	21	44		
Tons of coal raised from each working place per day	2	1·82		

North of England means the following three counties—Yorkshire, Northumberland, and Durham.

The CHAIRMAN said that having read Mr. Brown's paper, he could not but feel that the subject was a most important one to all in the room, and especially to those engaged in mining, and, therefore, he would call the attention of the meeting to its calm and deep consideration. Although it was not usual to discuss papers on the day they were read, he thought, however, that they ought to partly open the discussion then.——Mr. MENELAUS rose to address the meeting, when Mr. BROUGH said that there were members who were not in the same position as Mr. Menelaus was to discuss the subject then, and he thought the discussion ought to be postponed till every member had read the paper, and had an opportunity to make notes. Mr. Menelaus had a great advantage over them all, in having carefully read the paper and made his notes. He certainly thought that it was highly desirable that they should all be in the same position as Mr. Menelaus in discussing the paper.——Mr. MENELAUS said his object was not to discuss the paper. Their object in meeting was not to compete with each other; their only object in meeting was to elicit truth and promote improvement. He thought what he was going to say would better prepare mechanical gentlemen to meet the charges he was going to bring against them (laughter), and give the mining gentlemen a far better opportunity of defending themselves at the next meeting, than if he got up at the next meeting and made his remarks.——Mr. BROUGH: You were quite mistaken if you think for one moment that there was the slightest idea in my mind of competition. My object in rising was for the members first of all to calmly read the paper, and then to enter into a discussion; not into a competition.

After some further observations from Mr. BROGDEN and others, the CHAIRMAN put it to the meeting whether the paper should then be discussed or not, and the opinion was unanimous in the affirmative.

Mr. MENELAUS then proceeded to say: The Chairman has adverted to the great importance of the subject brought before us by Mr. Brown. I think you will all agree with me when I say that it is by far the most important subject this Institute has ever before discussed, or, indeed, is ever likely to discuss. We are told by a man of great experience, who claims to have gained that experience in the best school, and in the best way—viz., by fighting his way from the very bottom of the ladder—who at present manages one of the largest and most successful collieries in our district that our system of working coal is expensive, and bad for owner and workmen. He goes further. He asserts that this system, which, he says, cannot claim even the merit of cheapness, is so bad and radically wrong, that by it we heedlessly sacrifice every year the lives of from 70 to 75 of our fellow-creatures, which under a better system would, in all probability, be saved. We may some of us doubt Mr. Brown's facts and figures; and some, even while admitting them, may differ with him in the deductions he draws. Some of us may even question his discretion in bringing forward such a sweeping charge against the leading industry of the district. We must all admit, however, Mr. Brown's pluck and boldness in speaking so plainly on a subject upon which, it is clear, he feels strongly. He must well know that there are many good and strong men before him—men before him who will join issue with him on every point, and who will not quietly rest under the stigma of being behind the mining men of the North, either in ability to devise and carry out cheap and economical methods of working our coal, but what is of far more importance, in the being anxious and able to protect and preserve the limbs and lives of the men employed under them. We have here to meet a very grave charge. I say we, because there is hardly a member of the Institute resident in the district who is not in some way or othe connected with coal mining—either as owner, mining agent, or mechanical engineer; and I for one, although I am not, and never have been, a mining man, will frankly adopt my proper share of blame, if it proved that our system is really what Mr. Brown represents it to be. I will leave to the underground men the defence of the purely mining question, as it applies to the safety of life and economy of working. As a mechanical man, I frankly admit that, to say the best, our system is capable of great improvement. We have not adopted to any great extent the employment of machinery to aid, and in place of horses and men. We see and hear of various methods of hauling, for instance, adopted in other districts, which in my opinion it would be well to copy. Indeed, I will say in a word, that in this district little or no mechanical ingenuity has been brought to bear on hauling and handling the coal after it is put into the trams. Of course there were exceptions, and the sin lies mostly in the ironworks. But let anyone start at Hirwain, and go through the line of works, finishing at Nant-y-glo and Blaina, and he will see, I think, in many places, not in all, in the trams and roads, a mode of transport little improved, I should think, over that which was used to convey materials for the building of the Pyramids. (Laughter.) It is not the first time that I have said in this room, and I repeat it now, that our grandfathers were ahead of us for cheap hauling—that is, as far as trams and roads go generally. Again, I do not think our winding machinery is what it ought to be, and it is only in our pumps, when we have followed Cornish practice, that we can compare favourably with some of the best local mining districts. Although the matter is not mechanical, yet I cannot help saying one word about the wretched irregularity of work but too common in this district, and the small quantity of coal raised from each opening. Surely this cannot be right, and it ought to be attended to. Before closing my remarks, I would again advert to the great importance—I may say, indeed, the great gravity—of the subject before us; and I would venture to entreat you to discuss it with temper and calmness; but we must spare no trouble to set ourselves right, if we are right; and, if we are wrong, in God's name, let us admit it, and try to mend. (Applause.)

Mr. BROWN said that he wished to remark, in reply to an observation which had fallen from Mr. Menelaus, that he did not lay the blame on the management, but on the system. The number of lives lost in South Wales had been held up to the world by the public press as something awful; and their worthy Coroner had stated that more lives were lost in South Wales than in the whole of Yorkshire, Northumberland, and Durham. He blamed the system, and said out with it. All he said was, give the management more time to attend to the supervision of the collieries. He did not say that the North of England system was the best plan to be adopted, but he did say it compared favourably with theirs; and if any man adopted a principle whereby lives could be saved he would go with him.

Mr. MENELAUS said he had simply drawn attention to the state of things as they were, and not to blame anyone. They all knew that it was not always possible for persons who saw things wrong to put them right; and it often happened that, if they had the power, they could not put them right at the time they saw them. He could say that there were no men better able to do their work than the management of this country; but he thought if those improvements were introduced it would be a great advantage to all of them.

Mr. BEDLINGTON, on being asked his opinion, said it was doubtless the opinion of most of them that the subject was one which they would do best to discuss at their next meeting. He must confess that he was rather surprised at Mr. Brown laying such emphasis on the different officers in the North. He (Mr. Bedlington) understood that in South Wales they had their doorkeepers, hauliers, firemen, wastemen, overmen, and so on, just the same as in the North of England; but Mr. Brown laid special emphasis and stress upon the timbermen as a class for setting timber, instead of colliers setting their own timber. There they had the notion that other men would take more care of the colliers than the colliers themselves. To him, however, it seemed strange that a collier should not have as much regard for his own life as the timberman. He thought Mr. Brown's mode of calculation was open to objection. He had calculated the number of lives lost to the number of tons of coal raised. On the other hand, he (Mr. Bedlington) thought the only fair way was to calculate the number of lives lost in comparison with the number of men employed. It was well-known that in many places in the North of England colliers could cut more coal per day than in South Wales, and in some collieries a man might be able to cut only 1¼ ton in the same time that he could cut 3 tons of another vein. The speaker then proceeded to notice the data upon which the calculations were made.

Mr. BROWN said the tabular statement was hurriedly got up, and was not exactly correct.——Mr. BEDLINGTON was not going to introduce the paper. Mr. Brown said that the number of accidents in the North of England were fewer in comparison with South Wales.

Mr. BROWN: I took the report of 1864.——Mr. BEDLINGTON believed that was the view generally held by most of them; but they ought to consider the causes. Now, in South Wales they had several veins with very bad tops indeed, therefore there was greater liability to danger than in the greater number of veins worked in the North of England. Then, there was another element in the calculations—the thickness of the veins. In the North of England they were chiefly from 4 ft. to 4½ ft. thick, but in South Wales they had two important veins of considerable thickness—8 and 9 ft. thick. Then, supposing all those things were accounted for, was there anything in the management of the collieries.——Mr. BROWN said that in the North of England there were two shifts; that men were employed a less number of hours underground, and, therefore, they were less subjected to danger. If Welshmen would take a longer time in cutting a given quantity of coal than was taken in the North of England, how, he would ask, could colliery managers prevent it? Assuming they adopted the system of two shifts, how could they regulate the amount of coal cut? Assuming that loss of life was greater with long shifts, he contended that it would be a difficult thing to introduce the system of the shorter shifts—in fact, they at present found it difficult to get men to continue the ordinary system, to say nothing of getting them to adopt a new system. Perhaps, however, Mr. Brown would act as pioneer in adopting the new system, and ascertain its applicability to South Wales, and he (Mr. Bedlington) was sure they would all be most happy in adopting him as their leader. (Laughter and Applause). If they could get men to work in the pit a less number of hours, and do the same amount of work as they now did in longer hours, he must say there was a great deal in the system. But that was a matter he did not think was altogether within the control of managers of collieries. They must consider the men's likes and dislikes of any system. (Hear.)

Mr. BROWN begged to decline the honour of acting as pioneer, and he was sure that no man single-handed would carry it out. If they were held up by the public press, and were held responsible for the men's lives, they as managers must do something. It mattered not whether the lives were lost by fire, the falling of stones, or any other way, it was their duty to look to it. What he found fault with was the system, and he asked them to come forward, and all unite together in removing the evil. (Hear, hear.)

Mr. BEDLINGTON said Mr. Brown's observations bore him out in stating that there was great difficulty in the matter.——Mr. T. F. BROWN said that originally in the North of England the system was one shift. He should reserve any remarks he had to make till the next meeting.

Mr. BEDLINGTON, in reply to an observation made by Mr. Menelaus, said he considered the Welsh race to be equal to any colliers in any part of England.

Mr. BROWN said if one man could earn the same amount of money in eight hours as another did in twelve, the risk of life was reduced one-third. He thought the matter was only a question of exertion in certain directions, and soon men would be convinced that by adopting the system there would be less risk of life, and that they would be able to earn the same amount of money in a less amount of time. He contended that they ought to take some steps in the matter, and not sit contented where they were.

Mr. JOHN SMITH said that in Glamorganshire they worked a great deal of coal of 9 ft. thickness, it varied from 9 ft. to 15 ft., and the roof was very inferior. In the North of England the thickest vein was not more than 5 ft. 2 in. Mr. Brown had not yet had much experience in 9-ft. seams, but, no doubt, he would soon have it, and then he would find a great difference in the loss of life.

Mr. W. WILLIAMS mentioned the freedom from loss of life at Letty Shenkin Colliery, where the long work system was adopted, and said it was his opinion that men who spent eight hours in a stall, were not more safe than men who spent twelve hours in it. The 9-ft. and 6-ft. seams were the most dangerous to work.

Mr. TRURAN thought the safety of life depended more on long work than the narrow work. He could say that where they were obliged to work six and nine feet, pillar and stall, there they got more accidents.——On the proposition of Mr. ADAMS, seconded by Mr. BEDLINGTON, a vote of thanks was passed to Mr. G. Brown.

The SECRETARY next read a paper "On the Coleorton District of the Leicestershire Coal Field," by Mr. George Lewis.

This brought the business proceedings of the meeting to a close. The members afterwards dined together, under the presidency of Mr. G. Martin. On the removal of the cloth she usual loyal and complimentary toasts were duly honoured. The catering of the worthy host, of the Castle Hotel, gave general satisfaction.

NORTH WALES OIL MASTERS' ASSOCIATION.—At the adjourned preliminary meeting (Mr. G. H. Birkbeck in the chair) it was resolved that the amount of subscription be regulated by the number of retorts which are possessed by each member—not exceeding 20 retorts, one guinea per annum; not exceeding 50 retorts, two guineas per annum; not exceeding 100 retorts, three guineas per annum; not exceeding 150 retorts, four guineas per annum. Revolving or other retorts, working more than 2 tons per day, to count as four ordinary retorts, and each guinea subscription, in accordance with the foregoing scale, to give one vote. A committee was appointed, with power to appoint treasurer, solicitor, and secretary. After a long discussion, it was agreed that crude oil shall be understood to mean that produced from curly or smooth cannel, or cannel shale, worked either separately or combined. The standard specific gravity be taken at, or not exceeding, 905 for light crude, and 230 for heavy crude at 60° Fah. That once-run be understood to mean all the products of crude oil run dowd to pitch or coke, and that the standard specific gravity be taken at 880 at 60° Fah. The standard specific gravity for crude or once-run to be fixed at the above rate, and a percentage of allowance for each degree above or below the shall be arranged by the committee, so that no misunderstanding as to value shall exist. It was further resolved that prices be quoted, and oils be sold not and naked, the buyer to accept the delivery

at works or nearest rails; casks to be supplied by buyers, and delivered free to works or nearest rail, but if for convenience casks are supplied by the seller, then the same to be charged as a separate item in invoice at the current market prices, including carriage to works, and that weights of oil and tares of casks be taken as when leaving the works"; carriers' receipt note that the casks have been delivered to them apparently sound and in good condition to be a complete answer to any claim that may be made by the purchaser for allowance for short weight or leakage. Mr. T. Strange was again appointed secretary *pro tem.*, and the election of officers was deferred for a fortnight, that those then absent might attend.

PERILS OF MINING, AND THE MEANS FOR PREVENTING THEM.—An elaborate paper was read at the Society of Arts, on Wednesday (Sir Daniel Cooper, Bart., in the chair), in which the author, after regretting his want of personal experience, stated that his chief object was to introduce to notice a refined application of science, and one that he trusted would be found of great practical utility for indicating the presence of fire-damp in mines before it becomes dangerous—Ansell's Fire-Damp Indicator (of which a description will be found in the *Mining Journal* of Nov. 4, 1865). The paper not being of a practical nature, does not call for lengthy comment from us. We regret to find several material errors stated; among them, the author asserts that "females are also employed in considerable numbers underground" in Cornwall; however, the object of the paper was evidently to benefit the working miner, and as such it should be received. Mr. R. Hunt, F.R.S., and Mr. P. H. Holland joined in the discussion.

Mr. J. ARTHUR PHILLIPS observed that Mr. Holland had accused practical men of being prejudiced, but it must be remembered that practical men were fully aware that, generally speaking, scientific men were eminently unpractical, and consequently it was not to be wondered at if they (the practical men) sometimes hesitated in adopting the suggestions of men of science. With regard to Mr. Ansell's instrument, as indicating imperfect ventilation, it must be remembered that, although each individual instrument would doubtless give the alarm in case of an accumulation of gas in the locality in which it was situated, yet the state of ventilation will differ so essentially in the different portions of the mine as to necessitate the introduction of a great number of instruments along the different galleries and workings. In each of these separate wires would have to be attached, communicating with different instruments in the manager's office, necessarily entailing much expense and complication. Mr. Phillips, therefore, doubted if the proposed system would be found so easy of practical application as the gentleman who had last spoken appeared to anticipate.

Mr. HUNT begged to be allowed to say that Mr. Holland had left an impression on the minds of those who had listened to him that the proprietors of collieries were not sufficiently careful either of their men or their property. He inferred that they required to be compelled to do this thing and that thing, as though they were not themselves anxious to protect the lives of their men. He felt bound to say that his experience led him to the conclusion that throughout the United Kingdom there was no class of employers who were more desirous of protecting their men than were the colliery proprietors, and if we would only suggest to them—not insist upon it—the introduction of an appliance for the benefit of their men, and the security of their property, he believed they would at once adopt it.

Mr. BENJAMIN SHAW, referring to the invention of a safety-cage for miners, to prevent accidents from the breaking of the rope or chain in descending the shaft, enquired whether any sufficient reason was known for its not being generally employed. Having lately visited the Clay Cross Collieries, he could bear testimony to the measures which were taken by that company for providing for the education and social wants of the large community of people employed in those collieries; especial attention was there paid to the education of the children of the colliers.

Mr. R. H. C. WILSON writes to the Journal of the Society:—"I found, on examining Mr. Ansell's aneroid indicator, after the meeting, that it is really a pocket aneroid, the only difference in construction being that the back of the outside metal case is cut out, and a back of plaster of Paris is put in its place. It is really wonderful that so slight an alteration should cause the instrument to act independently of atmospheric pressure. It appears that a variation in the aneroid of one-tenth shows danger; the range of the instrument, therefore, between safety and danger, is very small indeed, and it would be very desirable if it could be made much opener in the scale."

FOREIGN MINING AND METALLURGY.

Complaints are made of the want of organisation among those engaged in metallurgical industry in Belgium—a difficulty which tells in moments of uncertainty like the present. Yet, whenever an effort is made to organise an association or a bourse of commerce, it is found impossible to overcome the apathy of persons interested; and when this state of affairs will be modified it is difficult to foresee. The effect of the present system is that while the proprietors of some furnaces quote casting pig No. 5 at 4*l.* 2s., others experience great difficulty in obtaining more than 3*l.* 18s. It is the same with refining pig; a quotation of 3*l.* 10s. per ton is considered by some as the exception rather than 3*l.* 8s. Rolled iron No. 1 is quoted by continuation at 6*l.* 16s. per ton; first-class plates at 9*l.* 4s.; rails at 6*l.* 16s.; and first-class girders at 7*l.* 12s. per ton. Two great preoccupations of the moment are the German conflict and the exceptional tone of the English market. The Belgian General Company for Lighting and Heating by Gas, which has works in operation at Prague, Tournai, Louvain, Charleroi (including Marchienne-au-Pont), Chemnitz, Rimini, and Sienna, sold during September, October, November, and December, 1865, and January, February, and March, 1866, 127,590,802 English cubic feet of gas, as compared with 113,301,312 English cubic feet in the corresponding period of 1864-5, showing an increase of 14,289,490 English cubic feet in favour of the current exercise. The approach of the dead season deprives reports as to the Belgian coal trade of some of their interest. There is, of course, a slackening in orders; this is a fact which must necessarily reproduce itself every year so long as the winter creates a greater want of coal than the summer. The falling off in the demand often creates an immediate fall in prices when the stock is important, and when there is an abundant supply of workpeople. This year, however, the case is different; the stock is small in the different groups, and miners are almost everywhere wanted. Prices accordingly sustain themselves pretty well, at least at present. Meetings are announced as follows:—Baden Zinc Mining Company, April 28, at Mannheim; Belgian Collieries Company, April 29, at Mons; Grande-Bordia Collieries Company, May 1, at Gosselies; Sambre and Meuse Mines and Ironworks Company, May 7, at Brussels; North of Charleroi Collieries Company, May 7, at Brussels; Niederfischbach Mines and Foundries Company, May 7, at Brussels, &c.

A report, which had obtained circulation to the effect that the Prussian Government had sold the fine collieries which it possesses in the Saarbruck basin, is again authoritatively denied. In 1864 the Saarbruck basin produced 5,412,005 tons of coal, of the value of 1,262,003*l.*; the total production of coal in Prussia is 16,500,000 tons annually, of an aggregate value of 4,120,000*l.* Prussia thus takes the second rank among European powers with reference to coal production.

A good demand for iron has been experienced at St. Dizier. Pig for refining, charcoal-made, has been offered at 4*l.* 8s. to 4*l.* 10s. per ton, without much business. Rolled iron from charcoal-made pig is maintained by continuation at 8*l.* 16s. to 9*l.* 4s.; ditto from mixed pig, 8*l.* 4s. to 8*l.* 16s.; ditto coke-made, 8*l.* to 8*l.* 8s. Hammered iron is held at 10*l.* 4s. to 10*l.* 8s. per ton, some works making 10*l.* 12s. Machine iron remains at its former price of 9*l.* 4s. to 9s. 8s. per ton. At Lyons merchants' iron, first-class, has been maintained at 8*l.* 8s. per ton. Dividends are announced as follows:—Sars-Longchamps and Bouvy Collieries at 8*l.* Vaast, May 1, at 1*l.* 4s. per share; Turiupu Colliery, May 1, 8s. per share; Carmaux Mines, 12s. 10d. per share (total distribution for 1865); Dourges Coal Mines, May 1, 4*l.* 16s. per share, less tax, interest and dividend for 1865; and Monticux St. Etienne Collieries, April 15, 1*l.* 4s. per share, less tax. Meetings will take place as follows:—Geisenkirchen Collieries, April 28, at Paris; Vienne Metallurgical Company, April 30, at Paris; Belmez Colliery and Metallurgical Company, April 30, at Paris; Hermé-Bochum Collieries Company, April 30, at Paris; Centre du Fiénu Colliery Company, May 3, at Paris; Roujan Collieries Company, May 5, at Paris; Roche-la-Molière and Firminy Mines Company, May 3, at Lyons; Aubin Mines, Forges, and Foundries Company (in liquidation), May 9, at Paris; Maubeuge Blast Furnaces Company, May 13, at Valenciennes, &c.

Copper has displayed a downward tendency on the Paris market; rough Chilian has receded to 84*l.* An analogous movement has occurred in the Havre market; Chilian has still provoked some business, but quotations indicate great feebleness; 30 tons of disposeable have found purchasers at 83*l.* per ton, Paris conditions; for delivery at the end of May the sale is mentioned of about 35 tons at 83*l.* 10s. At Hamburg the market is quiet; the article has displayed a downward tendency, which will, it is hoped, provoke the attention of purchasers. The Berlin copper market has been heavy, and at Cologne also there has been little demand. On the Dutch markets the demand for Banca tin is very moderate, and the threatened German conflict appears to awaken among purchasers fears which paralyse affairs. Prices have declined in consequence to a rather marked extent. The Hamburg market has been quiet, and prices have been nominal; Berlin has remained without sales worthy of mention, and Cologne has been tending downwards. At Paris quotations of tin have experienced a heavy depreciation, Banca having made 88*l.*, and Detroit 87*l.* per ton. In consequence of numerous purchases made on Austrian and Prussian account, transactions in soft German lead have been animated on the Hamburg market; on the spot the article is held very well; nevertheless, affairs for export have been at present inactive. On the Rotterdam market the article has been scarce, and prices have been well supported. In consequence of a purchase of 20,000 centners of soft German, made by the Prussian Government, and other orders which have come to hand, the Berlin market has been very firm, and prices indicate a notable advance on those quoted a few days since; in presence of the current state of political affairs in Germany, we have, probably, not seen the last of this advance. On the Hamburg market few transactions have been noted; spring arrivals have exerted at present little influence on prices. The Paris market remains without business; prices are nominal. The demand continues very active on the Berlin market. The Breslau market has been quiet, and the business done has been unimportant. For special marks the demand is a little more active, and prices are better sustained.

The coal basin of the Hainaut may be divided into four parts—the Charleroi basin, the Mons basin, the basin of the Centre, and the intermediate basin. Fifteen years since the only collieries in working in the intermediate basin were, commencing with the east, Forchies, Piéton, Bois-des-Vallées, Carnières, Mont-Sainte-Aldegonde, and Peronne. The southern limits of those collieries stopped at a line from the east to the west. Such was the state of affairs when, in 1853, there appeared an application for a concession under Anderlues and the neighbouring communes; this application had its imitators in 1856 and 1858, and the remainder of the intermediate basin became the object of important explorations. In 1854 the collieries of Peronne and Mont-Sainte-Aldegonde were again brought into working, by two powerful companies, which obtained notable extensions towards the south. These concessions had been previously abandoned, but a vigorous activity succeeded to the abandonment; other companies made sustained researches, and after some years of persevering labour concessions were granted of the Bois-de-la-Haye, Viernoy, Leval-Trahegnies and Ressaix Collieries. Applications for railways followed, and now four lines carry the coal obtained from the intermediate basin. Before 1853 none of the six collieries composing the intermediate basin produced any profit; besides, in all the southern parts of the collieries of the Centre a thickness of 1260 ft. of sterile land had to be traversed vertically before the first workable bed was met with, and all the attempts made in these workings to explore this level of 1260 ft. had hitherto remained sterile. Hence arose an opinion, which appeared to rest *primâ facie* on good authority, that the intermediate basin had no real value. But it was easy to prove that the examinations made by the collieries of the Centre were insufficient, as they should have been pushed beyond towards the south. The discoveries of Peronne, Mont-Sainte-Aldegonde, Bois-de-la-Haye, Carnières, and Bois-des-Vallées enabled it to be affirmed that the intermediate basin presents everywhere regular bearings, and that it contains a considerable number of powerful beds. Excellent results obtained at the Forchies Colliery (Monceau-Fontaine) show clearly that the prosperity of the basin depends solely on the question of transport. It has been shown, in fact, that—thanks to railways, which have enabled a saving of 1s. 8d. per ton to be effected in the conveyance of the coal of this colliery—it has been enabled to distribute dividends to its shareholders. This economy of 1s. 8d. per ton constitutes an annual profit of about 6000*l.* for each centre of working realised by transport only. But every improvement brings other ameliorations with it, and in the case of this colliery, which we have just taken as an example, the saving realised in the transport of coal is not the only advantage which has resulted from railways. It has been practicable to give a great extension to the workings, an extension which has had the effect of producing a diminution in the return price of the products obtained; and the abundance of its extraction has enabled the company to apply a part of its profits to the development of its works. Thanks to railways recently brought into working, the collieries of Piéton, Bois-des-Vallées, Carnières, and Mont-Sainte-Aldegonde are now in a full course of prosperity. In the southern part of the Peronne Colliery 12 beds, of an average thickness of 40 in., have been cut, with an inclination of from 10° to 12°. At the Bois-de-la-Haye Colliery 12 beds, of a thickness of 32 in., have been met with; they present the same inclination and the same quantity of rich coal. A railway from Piéton to Leval, which is in construction, will accommodate shortly the collieries of Bois-de-la-Haye and Viernoy; several lines are applied for, the routes of which pass in the neighbourhood of Bois-de-la-Haye, Viernoy, Bois-des-Vallées, and Piéton; and finally a line from Frameries to Chimay may be extended one day towards the basin of the Marne, while Piéton will be united to Fleurus and Huy. We may infer, then, that the intermediate basin will one day become an important metallurgical centre. The coal which the basin comprises is calculated in any case to dissipate the fears which some metallurgists entertain that they may possibly lack in future the coking coal required for the supply of their works.

COAL PRODUCTS.

The production of coal in the year 1863 in the United States and Europe amounted to an aggregate of 150,000,000 tons. Great Britain, "the workshop," not only produces but consumes a greater quantity of coal than the rest of the world combined. Her mines in 1863 produced 86,000,000 tons of coal; 78,000,000 tons to supply her own necessities, and 8,000,000 tons for export to her commercial dependencies. In 1863 three of the great manufacturing countries of Europe—England, France, and Belgium—compared in the consumption of coal with each other and the United States as follows:—

	Tons of coal consumed.
Great Britain	78,000,000
France	16,000,000
Belgium	7,000,000
United States	16,000,000

The production of coal in these four countries stood in 1863:—

Great Britain	Tons 86,000,000
France	10,000,000
Belgium	10,000,000
United States	15,500,000

These data exhibit that Great Britain and Belgium, by a full developement of their means of sustaining manufacturing industry, supply not only their own wants but also those of their neighbours, Great Britain exporting 8,000,000 tons and Belgium 3,000,000 tons. The area of the coal fields of Great Britain, France, Belgium, and the United States are estimated thus:—

	Area (square miles).
Great Britain	11,859
France	518
Belgium	1,719
United States	146,850

The figures of this estimate exhibit the vast superiority of the United States over Great Britain, France, and Belgium in the natural resources of steam-labour power, and clearly point to the supremacy of the Republic, at no distant period, in steam-labour industries. The coal fields of Great Britain, France, and Belgium extend over an area of 14,096 square miles; those of the United States over 148,569 square miles, a ratio of 10 to 1.

The production of coal in the United States is continually on the increase, as will appear from the following statement of the production of coal in the fiscal years 1863, 1864, and 1865, the quantities being calculated from the Internal Revenue report of the amount of tax upon production of coal:—

	Tons of coal produced.
1863	15,500,000
1864	16,300,000
1865	17,000,000

—*Oil News, Mining and Manufacturing Journal (U.S.).*

There was running on the South-Western line on Wednesday a monster engine, called the "Colossus." It has been built to draw a train of 80 loaded wagons 80 miles in three hours, each loaded wagon weighing about 10 tons. While dragging nearly 1000 tons from Southampton to London with great speed, the engine will consume 1 ton of coke and a few gallons of water.

PORTUGAL.—A GENTLEMAN, having some valuable mine concessions in the North of Portugal, is ANXIOUS to MEET WITH A CAPITALIST to JOIN him in WORKING the same, preparatory to transferring them to public companies. About £2000 required, and advertiser will admit a partner on moderate terms.—Address, Messrs. JAMES WOOLCOTT and Co., Laurence Pountney-hill, Cannon-street, London.

COPPER MINING.—WANTED, a COMPETENT PERSON to SUPERINTEND (under the manager) the WORKING OPERATIONS of a RECENTLY FORMED COMPANY, whose mines are near Oporto.—Address, stating particulars, to "T. M. J.," MINING JOURNAL office, 26, Fleet-street, London, E.C.

COLLIERY MANAGER.—WANTED, immediately, a COLLIERY MANAGER, to take ENTIRE CHARGE of a BLACK SHALE COLLIERY, in DERBYSHIRE. Present production, 70 tons a day, on which a large increase is required.—Applications, with references and salary required, to be addressed to "A. B.," care of Mr. Barras, stationer, High-street, Sheffield.

TO COLLIERY AND ESTATE PROPRIETORS.—A GENTLEMAN, who has had several years part proprietorship and the active management of an important colliery in the Midland Counties, from which he has recently retired, and who is perfectly conversant with land and mine surveying and the practical working of collieries, is DESIROUS of MEETING with an ENGAGEMENT. Ample references will be given.—Apply to Messrs. WOODHOUSE and JEFFCOCK, Mining Engineers, Derby; or to Messrs. COLDICOTT and CANNING, Solicitors, Dudley.

TO CAPITALISTS.—WANTED, from £2000 to £5000 to CARRY OUT a PATENTED INVENTION in MARINE ENGINEERING, which saves one-half the ordinary fuel. As this is a genuine undertaking, and will yield large profits, principals or their solicitors only will be treated with.—Address, in first instance, to "Engineer," 35A, Moorgate-street, London, E.C.

A GENTLEMAN having an extensive connection with Merchants, Manufacturers, and others, would be GLAD to UNDERTAKE the SALE of PATENTED ARTICLES or INVENTIONS, on commission.—Apply to Mr. W. T. RAWLE, patent and mining agent, 8, Small-street, Bristol.

COMMISSION AGENCY.—A GENTLEMAN, residing in the heart of the West Cornwall mining district is WILLING to UNDERTAKE the SALE of CANDLES, STEEL, ROPE, or any other MATERIALS USED IN MINING, on commission. The highest references will be given. Advertiser has a large mining connection. Apply, "H. W.," MINING JOURNAL office, 26, Fleet-street.

WANTED TO PURCHASE, new or secondhand, ONE or TWO PORTABLE ENGINES, about 8-horse power, with fire-boxes suitable for burning wood. Also, TWO 7 in. close-top DRAWING LIFTS, with clack pieces, &c., and 5 ft. bored working barrels, with 120 ft. 7 in. pipes for same, with faced flanges and bolts complete.—Address, stating particulars, to "Z. Z.," Washford, Taunton.

THE CARBERRY MINING COMPANY (LIMITED).—The Directors hereby give notice that the ORDINARY HALF-YEARLY MEETING of the company will be HELD at 29, Westmoreland-street, Dublin, on MONDAY, the 7th May, 1866, at the hour of Two o'clock in the afternoon, for the purpose of receiving the directors' report and statement of accounts, and the transaction of the other ordinary business of the company. By order,
29, Westmoreland-street, Dublin, April 26, 1866. J. P. O'REILLY. Sec.

SCOTTISH AUSTRALIAN MINING COMPANY (LIMITED).—Notice is hereby given, that the HALF-YEARLY GENERAL MEETING of the shareholders of this company will be HELD at the London Tavern, Bishopsgate-street, London, on FRIDAY, the 4th day of May next, at Twelve o'clock at noon precisely. The Share Transfer-books will be closed from Thursday, the 26th, until Friday, the 4th of May next, both days inclusive.
By order of the Directors, C. GRAINGER, Secretary.
1, King's Arms-yard, Moorgate-street, London, April 24, 1866.

THE AUSTIN CONSOLIDATED SILVER MINES COMPANY (LIMITED).—Notice is hereby given, that a SPECIAL GENERAL MEETING of the members of this company will be HELD at the offices, on THURSDAY, the 10th day of May next, at Twelve o'clock at noon precisely, for the purpose of confirming the special resolutions adopted at a Special General Meeting of the members of this company, held on the 23d day of April inst., a copy of which resolutions is annexed to the circular convening such confirmatory meeting.
By order of the Board, WILLIAM DAVIES, Secretary.
Offices, 123, Fenchurch-street, London, E.C., April 24, 1866.

NOTICE IS HEREBY GIVEN, that the FIRST ORDINARY GENERAL MEETING of the shareholders in the ROSSA GRANDE GOLD MINING COMPANY (LIMITED) will be HELD at the offices of the company, 182, Gresham House, Old Broad-street, in the City of London, on MONDAY, the 7th day of May next, at Twelve o'clock, when the directors' report and a financial statement of the affairs of the company will be submitted to the meeting.
The Transfer-books of the company will be closed from the 12th to the 21st day of May next, both inclusive.
And notice is also hereby given, that immediately after such Ordinary General Meeting, an EXTRAORDINARY GENERAL MEETING will be HELD at the same place, for the purpose of altering and varying by special resolution the 24th Clause of the Articles of Association of the company, in pursuance with the undertaking to that effect given by the Board to the Committee of the Stock Exchange.
By order, J. JAMESON TRURAN, Secretary.
182, Gresham House, London, April 21, 1866.

Tenders for Gunpowder.

GUNPOWDER.—TENDERS WANTED, before 3d of May, for TWELVE MONTHS' SUPPLY of GUNPOWDER, for the GREAT LAXEY MINING COMPANY (LIMITED). To be delivered at the mines. Payments made quarterly.—Address, "Directors of the Great Laxey Mining Company (Limited), Isle of Man."

Contract for Steam Coal.

SOUTH-EASTERN RAILWAY—CONTRACT FOR STEAM COAL.—The Directors of the SOUTH-EASTERN RAILWAY COMPANY are PREPARED to RECEIVE TENDERS for the SUPPLY of about EIGHT THOUSAND TONS of STEAM COAL, of approved quality, to be delivered at Folkestone within the next twelve months.
Forms of specification and tender to be had on application at the company's office, and tenders to be sent to the undersigned, endorsed "Tender for Steam Coal," on or before Tuesday, the 15th May next. S. SMILES, Sec.
Secretary's Office, London Bridge Terminus, April 27, 1866.

SCINDE RAILWAY COMPANY—INDUS STEAM FLOTILLA.—The Directors of the Scinde Railway Company invite TENDERS for the PURCHASE of a PAIR of inclined fixed cylinder MARINE ENGINES, of 120-horse power, diameter of cylinder 36 inches, stroke 7 feet, without boilers, which may be seen on application at the works of Messrs. Kitson and Co., Airedale Foundry, Leeds. Tracings may be seen, and further information obtained, from Messrs. Kitson and Co., and at the offices of the company, on and after the 16th inst.
Tenders to be sent in addressed to "The Directors of the Scinde Railway Company—Indus Steam Flotilla," on or before Twelve o'clock on Wednesday, the 30th May next, endorsed "Tenders for the Purchase of Marine Engines." The Directors do not bind themselves to accept any tender. By order,
S. H. R. PARRY, Acting Secretary.
Scinde Railway Company's Offices, Gresham House, Old Broad-street, London, April 10, 1866.

NORTH MOOR FOUNDRY COMPANY (LIMITED).—Notice is hereby given that the SHARE LIST of this company will be CLOSED on the 30th instant, after which no application for shares can be received. The vendors take about two-thirds of their present interest in shares, and guarantee the other shareholders an average minimum dividend of 15 per cent. per annum for five years, depositing their own shares in the hands of the company as security. Forms of application for shares may be obtained from Messrs. DARBYSHIRE and ASHWORTH, Brown-street; Messrs. T. M. FISHER and SON, Tib-street; and from Messrs. FITZGERALD and Co., 63, King-street, Manchester.

THE DOROTHEA WEST, GREEN, BLUE, AND RED SLATE COMPANY (LIMITED).
Registered under the Companies Act, 1862, whereby the liability of each shareholder is limited to the amount of his shares.
Capital £50,000, in 10,000 shares of £5 each.
Deposit, £1 per share on application, and £1 10s. on allotment.
DIRECTORS.
THOMAS WATERS BRITTAIN, Esq., Dagenham, Essex (Director of the Princess of Wales Slate Company, Limited).
Col. HUGH CALVELEY COTTON, Anglesey, Gosport, Hampshire.
Lieut.-Col. H. GARNET MAN, Halstead Lodge, Sevenoaks, Kent (Chairman of the Prince of Wales Slate Company, Limited).
JAMES MAW, Esq., Stratford, Essex (Director of the Llanfair Green and Blue Slate Company, Limited).
WM. WALTER, Esq., Berengrave, Rainham, Kent.
BANKERS—The National Bank, Old Broad-street, E.C.
AUDITOR—F. Bertram Smart, Esq.
GENERAL MANAGER—Mr. Thomas Harvey.
OFFICES,—33, KING STREET, CHEAPSIDE, E.C.

This company is being formed for the purpose of purchasing and extending the workings of an established and valuable quarry in Carnarvonshire, known as the Dorothea West, lying on the hill side of Nantlle Vale, and embracing and intersecting nearly all the valuable veins of slate in that district, including the celebrated Dorothea veins.
The company have agreed to purchase the quarries, which are in full work, and realising a large monthly profit, together with the plant and machinery, for the sum of £20,000, one-half of which is to be paid in cash, and the remainder in paid-up shares. This amount is far less than the capital expended in developing the quarries, and bringing them into their present profitable condition; but the original proprietors have stipulated for retaining a large interest in the company.
There are seven veins of slate in the property, of fine colour, split, and quality, the slates from which can be seen on the quay at Carnarvon, from whence they are shipped or sent off by rail to all parts. The new Charing Cross Railway Hotel, the London Bridge Hotel, and the Star and Garter Hotel, Richmond, are covered with green slates from this quarry.
The green slate from the Dorothea West has been long known as the finest in colour and quality, as well as the largest vein of green slate in Carnarvonshire. Green Duchesses are now worth £19 per thousand, or £6 6s. 8d. per ton, and other sizes bear a proportionate price, being all about double the price of the best blue, and exceeding the average price per ton of all the copper ores of Cornwall.
Full prospectuses, with reports and forms of application for shares, can be had at the company's offices, together with an account of the working and profit for the month of March, 1866.

MOSS RAKE MINING AND LEAD ORE SMELTING COMPANY (LIMITED).
To be incorporated under the Limited Liability Companies Act, 1862.
Capital £4000, in 4000 shares of £1 each.
There are already a good number of shares applied for in the district.
Deposit on application 1s. per share, and 1s. per share on allotment.
DIRECTORS.
Mr. ANTHONY GILBERT, Bradwell.
Mr. THOMAS BROADBENT, Bradwell.
Mr. JABEZ MORTON, Bradwell.
Mr. JOHN EYRE, Bradwell.
Mr. GEORGE ELLIOTT, Bradwell.
Mr. JOHN HALLAM, Bradwell.
Mr. JOEL ELLIOTT, Bradwell.
Mr. ROBERT MIDDLETON, Bradwell.
Mr. JOHN FOX, Bradwell.
Mr. ROBERT BINGHAM, Long Sight, Manchester.
Mr. ROBT. COOPER, Great Hucklow.
TREASURER—Mr. Anthony Gilbert.
SECRETARY—Mr. Thomas Broadbent.

PROSPECTUS.
Moss Rake is situated at Bradwell, in the High Peak hundred of the county of Derby. It is the most powerful vein or lode of lead ore in that celebrated lead mining district, and has been worked from the time of the Druids. These workings have not been carried to a great depth in the vein, in consequence of no levels being cut, or steam-power brought to bear on the workings. The above vein or lode has been fully proved to the extent of three miles in length and seventeen yards in width. The country through which the vein or lode takes its course is very mountainous, and the present company's project is to take a level from the east end of the vein, which will give a depth of 100 fms. per mile. There are satisfactory indications of opening up the most extensive workings in the district at a very moderate cost.
The population of Bradwell numbers 1500, and has been principally supported by the product of this vein for more than 100 years, as there has been no other employment. There are about twenty different mines in the length of this vein or lode, and many of the above mines have been given up being wrought, for want of the proposed level. The present company have purchased and leased the mines at the east end for a considerable length.
The directors and persons being mine owners, miners, and others in the district, have already taken up a considerable number of shares, and beg to assure the public that with such a staff of practical and experienced directors, and such an extensive and powerful vein, also natural advantages of situation for working the same with economy and success, they are very sanguine of speedily making this a very profitable undertaking.
For forms of application, and further particulars, apply to Mr. THOMAS BROADBENT, Bradwell, near Sheffield, Secretary, or any of the above-named directors.
As the Share List will be closed on the 1st of May, 1866, early application is requested.—Bradwell, Derbyshire.

ELLEN UNITED COPPER AND ZINC MINING COMPANY (LIMITED).
Capital £30,000, in 15,000 shares of £2 each. Certificates of five shares each.
10s. per share to be paid on application, and 10s. on allotment.
REGISTERED OFFICES OF THE COMPANY,
28, PRINCESS STREET, MANCHESTER.
8000 shares have already been allotted, and paid upon.
Application for the remaining shares to be made to the secretary, Mr. THOMAS MOLYNEUX, 28, Princess-street, Manchester, or to the following agents—Mr. G. P. DUNCALF, King Edward-street, Macclesfield; Mr. BURROWS, Redruth, Cornwall; Mr. J. PAUL, Chacewater; and Mr. C. TETHERLY, Exeter, of whom full prospectuses and reports may be had, and every information obtained.
N.B.—At a meeting of the directors and shareholders (numerously attended from Manchester, Macclesfield, &c.) held on the mine, on Saturday, 31st March, Thomas Thorns, Esq., one of the directors, being presented with a silver trowel, the foundation stone was laid for the 70-in. cylinder engine, purchased from Messrs. Derry and Son, St. Austell, to be erected immediately, when a large number of men will be put on tribute, and regular returns made.
An early application for shares is requested, as the directors will shortly close the list.

BARROW HEMATITE STEEL COMPANY (LIMITED).
HEAD OFFICE AND WORKS,
BARROW-IN-FURNESS, LANCASHIRE.
BRANCH OFFICES,
No. 2, GREAT GEORGE STREET, WESTMINSTER.
No. 73, ST. VINCENT STREET, GLASGOW.
No. 44, QUEEN STREET, WOLVERHAMPTON.
DIRECTORS.
His Grace the DUKE OF DEVONSHIRE.—CHAIRMAN.
LORD FREDERICK CHARLES CAVENDISH, M.P.
HENRY WILLIAM SCHNEIDER, Esq., M.P.
WILLIAM CURREY, Esq.
FREDERICK ILTID NICHOLL, Esq.
JAMES RAMSDEN, Esq.—MANAGING DIRECTOR.
SECRETARY—Francis T. Rolls, Esq.
MANAGER—J. T. Smith, Esq.

This company was originally formed for the manufacture of steel under the Bessemer process, from the furnaces of Messrs. Schneider, Hannay, and Co.
The company have since arranged for the transfer to them, on the 1st January, 1866 of the Hematite Iron Ore Mines and Furnaces belonging to that firm.
In addition to the supply of iron ore and hematite pig-iron, and the manufacture of steel rails, which was the primary object of the company, they manufacture tyres and axles.
Plates for shipbuilding, boilers, girders, bridges, and roofs.
Bars, angles, guns, and forgings of every description in steel.

THE WHITTINGTON COLLIERY COMPANY (LIMITED).

To be registered under the Companies Act, 1862, whereby the liability of each shareholder is limited to the amount of his shares.

Capital £35,000, in 7000 shares of £5 each.

2774 of such shares to be preference shares, on which £3 per share only is to be paid, and to receive a dividend of £10 per cent. per annum before the 4226 ordinary shares, representing the capital of the Whittington Freehold Colliery Company, receive any dividend.

NEW DIRECTORS.

(To be elected by the shareholders.)

BANKERS—The Imperial Bank (Limited), Lothbury, London.

SOLICITORS—Messrs. Wilson, Bristowe, and Carpmael.

AUDITOR—To be elected at the first meeting.

SECRETARY—C. S. Collard.

OFFICES,—4, SKINNER'S PLACE, SISE LANE, LONDON.

PROSPECTUS.

This company is formed to take over the property of the Whittington Freehold Colliery Company (Limited), now in course of voluntary liquidation. The directors of that company have been advised to adopt that course as the best mode of overcoming difficulties caused by the special provisions of their Articles of Association, framed to protect the interests of the late Mr. Pierce, the vendor of the estate to the company, and which are inapplicable to the present position of the property.

The property to be transferred to this company consists—

1.—Of 170 acres of freehold surface land and houses, now producing a rental of £600 per annum. The value of this estate, which is annually increasing, is estimated at £17,000.

2.—Of a mineral estate of about 300 acres, containing valuable seams of coal and ironstone. The principal—or the Silkstone coal seam—is well known in the market, and realises a high price. The ironstone is of the best quality.

The minerals in the estate have been recently valued by Messrs. Woodhouse and Jeffcock, of Derby; the coal at £40,000, and the ironstone at £11,000.

3.—Of the pits (two), the plant, machinery, coke ovens, railways on the surface and underground, all of which are in very good working order. The value of this portion of the purchase cannot be less than £10,000.

This property—including the additions which have been made to the plant during the last two years, amounting to little short of £4000—is now to be transferred to this company for a sum not exceeding £62,000; and of this sum £37,600 is provided by several mortgages, bearing interest at 5 per cent. per annum, repayable by fixed yearly instalments, thereby reducing materially the amount of the share capital entitled to dividend.

During the last two years, from various unavoidable causes, but little more than 27,000 tons of coal have been annually raised. It would have been unjustifiable on the part of the directors of the old company to incur any important expenditure to increase this quantity; but now the difficulties which have hitherto obstructed their progress are removed, the directors have advised the shareholders to form a new company, with capital sufficient to raise on an average not less than 75,000 tons of coal per annum, which can be done by the existing machinery with a few comparatively inexpensive additions.

It is, however, satisfactory to know that even whilst raising only 27,000 tons of coal annually, every charge connected with the colliery, except the interest on the mortgages, has been regularly paid out of the difference between the cost and the selling prices of the coal, coke, and ironstone.

The experience of the last two years has established—1st, the average prices to be obtained for the coal, coke, and ironstone; 2d, the cost of mining; and, 3d., the annual expenditure not included in mining charges.

Upon these facts, applied to very improved conditions, the Chairman of the old company, W. Hawes, Esq., has made the following statement of the future prospects of this company:—

1. The annual charge to be borne by the colliery, not included in mining expenses, will be—Interest on mortgages £1880
Redemption of mortgage capital 2300
Direction and London office ..... 750 = £1930

2. The annual charge for dividend—
1. On new share capital of 8322*l.*, 3*l.* per share on 2774 shares, at 10 p. ct. £ 832
2. On old capital, 21,130*l.*, at 5 per cent. ..... 1056 = 1888
Together £3818

3. The nett revenue to meet this charge to be derived from the coal, coke, ironstone, and rents, is estimated thus, from—
Coal and coke £3437
Ironstone 800
Rent ..... 600 = £9837
Leaving a surplus, in addition to the 10 per cent. and 5 per cent. dividends, already provided for, of 3019
Equal to 10 per cent. on the gross capital of 29,450*l.* £9837

But in a few years (the exact time depending on the sale of the surface property) the payments for interest and for the redemption of mortgage capital will cease, and then there will be the further sum of £4180 divisible among the proprietors.

The capital proposed to be raised to work out these results is £35,000, divided into 7000 shares of £5 each—
4226 of which, or ordinary shares fully paid up, are to be allotted to the old company, representing capital of £21,130
And 2774 preference shares to be allotted to new subscribers, representing 13,870
Total £35,000

The 2774 preference shares are to be entitled to a dividend of 10 per cent. per annum before any dividend is paid upon the old capital of £21,130.

The calls upon the 2774 preference shares are to be payable thus—10s. per share on application, 20s. on allotment, 10s. in three months, 10s. in nine months, and 10s. per share in twelve months from the date of allotment, and no further call beyond this £3 per share to be made without the authority of a general meeting of proprietors. Calls paid in advance to be entitled to interest at the rate of 10 per cent. per annum.

It now remains to explain the data upon which after the first year the estimated profit of the new company rests, and the probability of its being realised.

1.—The difference between the cost of the coal at the pit's mouth and the selling price in 1864 and 1865.

2.—The economy in the cost of mining to be derived from working the seam of coal nearly on the flat, instead of at an angle of 30 or 35 degrees, as it has hitherto been worked, will in the opinion of our manager and mining engineer, as expressed in their report herewith, amount to 20 per cent.

3.—The increase of the quantity to be raised, from 27,000 to 75,000 tons, and the consequent division of all the fixed expenses, such as salaries, office expenses, direction, London charges, rates and taxes, by 75,000 tons instead of 27,000 tons.

In fact, while raising the smaller quantity only must result in a constant loss, raising the larger quantity will insure a good mercantile profit, with a margin to cover the uncertainty which too frequently attends mining operations, the calculations respecting which are not based as these are upon an actual working for two years.

Under these circumstances, the new company is confidently recommended to the shareholders in the old company, and it is hoped they will not allow new shareholders to step in and realise advantages which properly belong to those by whose energy, anxiety, and responsibility they will have been earned.

The amount of new capital is not large, and the calls are spread over twelve months, so as to give the greatest possible facility to each new shareholder to take his *pro rata* number of shares.

Applications for shares must be made to the secretary or bankers of the company, on the form annexed to the prospectus, on or before the 28th of April.

REPORTS.

Whittington Collieries, near Chesterfield, April 3.—I send you Mr. Gillett's letter, which I have signed. In making your calculation as to the produce the colliery is likely to make, I think you may fairly calculate that the deep coal will make a better price than we have hitherto obtained; and if you reckon 6d. per ton more as an average, I think you will be within the mark. As you know, Mr. Gillett is very cautious in giving his opinion, and I look upon the statements contained in the letter as based upon calculations allowing for all contingencies that can occur. JAS. O. BATE

To W. Hawes, Esq., Chairman.

5, Wardwick, Derby, April 2.—In reply to your enquiry of the 29th ult., we beg to say that we have fully considered the questions you put as to the present state of the colliery works, and the alterations proposed to be made in the same, and beg to report as follows:—

1.—As regards the present state of the mine. On making up the plans we find that very little of the coal opened out by the late Rev. W. M. Pierce now remains to be got, and that, unless something is immediately determined upon, the colliery works must necessarily be suspended at an early period.

2.—From the steep inclination of the seam, and the great expense incurred in the maintenance of the incline planes, and other roads, the cost of working has been high, as you are aware. By your instructions, we proceeded some months ago to drive a pair of exploring headings, for the purpose of proving the position and quality of the large area of coal as yet unworked in the "deep" of this estate, and are happy to inform you that the coal proves to be very satisfactory, both as regards its quality and thickness, that it is comparatively free from water, and we see no reason to doubt that it will be raised at a cost of 1s. per ton at least under the cost hitherto incurred.

3.—After carefully going into the details of the proposed alterations, we are of opinion that the whole will be accomplished for about £2500, provided that we do not meet with any large feeders of waters in deepening the shaft, a contingency which we have no reason to expect. When the proposed alterations are carried out, which, if commenced at once, might be completed in the space of twelve months, the colliery will be capable of producing from 200 to 300 tons of coal per day; and we feel fully satisfied that it will amply repay the small additional amount of capital required to develope the new works, and bring the colliery into a profitable state. F. C. GILLETT, JAS. O. BATE.

To W. Hawes, Esq., Chairman.

CAPT. J. RABEY OFFERS FOR SALE FIFTY SHARES, at the nett price of £3 per share, in the CAI-R-PANT MINE, joinining the great Minera Mine, and one of the best prospects in the district, being all whole ground, and the mine paying for itself now at the shallow depth of 40 yards.—Address, Captain J. RABEY, Coedporth, near Wrexham, Denbighshire, North Wales.

WASHOE AND REESE RIVER MINES.—The UNDERSIGNED, being established in GOLD HILL, near VIRGINIA CITY NEVADA, as MINING SURVEYORS, CHEMISTS, and ASSAYERS, OFFER THEIR SERVICES to MINING COMPANIES and GENTLEMEN in ENGLAND, having interests in the above-named districts.

Mines examined and reported on, at a scale of charges which obviously ensures a large saving upon the costs (in fees and travelling expenses) of special agents sent from England. Telegrams (arriving from London in 14 days) promptly attended to.

W. T. RICKARD, F.C.S., M.G.A., &c. (late Mitchell and Rickard, London).
CONRAD WRIGAND (late Supervising Assayer of the United States Mint, San Francisco).

London Agent:—T. W. Burr, Esq., 12, Paternoster-row.

GOVERNMENT SECURITIES, JOINT-STOCK BANK, RAILWAY DEBENTURES AND BONDS, COLONIAL SECURITIES, FOREIGN BONDS, AND BRITISH MINES.—MESSRS. TREDINNICK AND CO., of 78, LOMBARD STREET, LONDON, E.C., may be consulted confidentially as to the eligibility of all *bond fide* investments. A selected list forwarded on application.

MESSRS. TREDINNICK AND CO., STOCK AND SHAREBROKERS, AND DEALERS IN BRITISH MINING SHARES, 78, LOMBARD STREET, LONDON.

"THE CITY HIVE."—A Journal of Commerce, Banking, and Mining. Price 1d

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the WORVAS DOWNS MINING COMPANY.—TENDERS, stating the highest price which will be given for the 24 inch cylinder PUMPING ENGINE and 10 ton BOILER and FITTINGS complete, at and upon WORVAS DOWNS MINE, in the parish of Uny Lelant, Cornwall, will be received at the Registrar's Office, Truro, until the 8th day of May next.

R. H. BAMFIELD, Solicitor, St. Ives.
F. HEARLE COCK, Truro
(Agent of the said Solicitor).

Dated Registrar's Office, Truro, April 25, 1866.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the WEST CLIFFORD UNITED TIN AND COPPER MINING COMPANY (LIMITED).—TENDERS will be received at the Registrar's Office, Truro, until the 12th day of May next, stating the highest price which will be given, subject to the conditions of sale which may be there seen, for the DEMISES or GRANTS by virtue of which the mining operations of the said company have been carried on, and the MINING MACHINERY, pitwork, MATERIALS, and EFFECTS now at the WEST CLIFFORD UNITED MINES, in the parish of Gwennap, in the county of Cornwall, including, amongst other things, ONE 80 in. cylinder PUMPING ENGINE, with THREE BOILERS about 11 tons each; ONE 26 in. cylinder WINDING ENGINE, with BOILER about 10 tons; balance-bobs, lifts, rods, shears, and steam capstan, with rope; ladders, whims, &c.

The mine and materials may be inspected on application to RICHARD OLIVER, the officer of the Court in possession at the mine, and further particulars obtained at the Registrar's office, or from Mr. JOSEPH ROBERTS, Truro

Dated Truro, 26th day of April, 1866. (Solicitor for the Petitioner).

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

MICHELL v. CHEGWIDDEN AND OTHERS.
IN RE TRESAVEAN AND TRETHARRUP MINE.

THE SALE of SHARES herein, advertised to take place this day, WILL TAKE PLACE on WEDNESDAY, the 9th day of May next, at One o'clock P.M.—Dated Registrar's Office, Truro, April 25, 1866.

TUESDAY, MAY 1, 1866.—WENTWORTH CONSOLS MINE, PERRANZABULOE, NEAR TRURO, at Eleven o'clock in the forenoon.

MR. BURGESS, Land and Machinery Valuer, is instructed to SELL, BY PUBLIC AUCTION, at WENTWORTH CONSOLS MINE, on the above date, at Eleven o'clock in the forenoon, the undermentioned VALUABLE MINING MACHINERY and MATERIALS, viz.:—

60 in. cylinder PUMPING ENGINE, 11 tons BOILER, 9 ft. stroke in the shaft, and 10 ft. in the cylinder, made by Harvey and Co., Hayle, 1864.
30 in. cylinder PUMPING ENGINE, 6 ft. stroke in the shaft, 8 ft. in the cylinder, with feed and steam pipes.
Shears, 65 ft. high, with sheaves, &c., complete
1 8 arm capstan.
Angle bob.
90 fms. 13 in. capstan rope.
24 fms. 9 in. pumps.
10 fms. 15 in. pumps.
16 fms. 14 in. pumps.
7 fms. 16 in. pumps.
1 9 in. doorpiece.
1 7 in. doorpiece.
2 13 in. doorpieces.
1 16 in. H and doorpiece.
1 8 in. H and doorpiece.
5 13, 8, and 7 in. working barrels.
4 16 and 14 in. matchings.
6 16, 14, 13, 9, 8, and 7 in. windbores.
1 13 in. plunger pole, stuffing box and
28 fms. 2½ in. iron bucket rods. [gland.
30 fms. 1¼ in. bucket-rods.
42 fms. 13 in. pitch pine rods.
27 fms. 6 in. rods.
9 pair 7 and 8 in. faggotted rod plates.
Pair of caps and legs for flat rod chain.
28 18 in. flat rod pulleys.
130 fms. iron stave ladders.
Weighbridge up to 6 tons—new about 12 months since, weighs to a great nicety, made by Pooley, Liverpool
3 horse whims and shaft tackles, com-
4 shaft rolls. [plete.
140 fms. 4½ in. wire rope (new).
60 fms. 2½ in. wire whim rope (new).
60 fms. 2½ in. wire whim rope.
70 fms. 6 in. hemp rope.
70 fms. air pipes.
200 fms. 10 and 7 in. launders.
Double power crab winch.
Small winch.
2 cisterns; chain.
1 40 in. smiths' bellows (nearly new).
Anvil, vice, screw tools, smiths' tools.
New and old iron.
Staples and glands, rod and flange bolts, pump rings.
Tramroad iron. [miners' tools.
6 horse whim kibbles, screw stocks,
Small beam and scales, spring balance up to 2 cwt.
A quantity of timber, &c.
Dated April 18, 1866.

MINERAL BOTTOM MINE—TUESDAY, MAY 1, 1866, at Eleven A.M.

MR. BURGESS, Land and Machinery Valuer, is instructed to SELL, BY AUCTION, the 1st May, at MINERAL BOTTOM, PERRANZABULOE, four miles from Truro, the following valuable and recently-new MINE MATERIALS:—

A first-class 72 in. cylinder PUMPING ENGINE, 10 feet equal beam, ONE NEW BOILER, 11 tons, and fittings
1 shears, 60 ft. legs, oak caps
8 arm capstan
Large capstan, axle, and socket (12 arms)
9-16 capstan new chain
36 fms. pitch pine rods, 14 in.
Clasps and joints
4 14 in. bucket prongs
20 17 in. 9 ft. pumps' bottoms, complete
11 15 in. 9 ft. ditto
1 13 in. working 13 ft.
1 14 in. 10 ft. sinking windbore
1 14 in. 6 ft. windbore
Axles and gear for water-whim
Iron stave ladders; wood ditto
Horse whim; shaft tackle
50 fms. wire rope
1 large capstan shieve
1 very powerful double crab winch
1 40 in. smiths' bellows
1 anvil and kieve; smiths' crane
Staples and glands
Flange and rod bolts
Bucket rods, best iron, 1¼ 1¼ in.
Smiths' and miners' tools
Large beam scales and stands
Screw tools and taps
13 ft. 14 in. plunger pole
Sundry timber, iron, &c.

Wentworth and Mineral Bottom being near each other, Mr. Burgess invites early attendance, as both the sales will be held on the same day.

Refreshments as usual. Purchasers' attendance will be esteemed as a favour.

Barncoose, Redruth, April 18, 1866.

WHEAL TREMAYNE, NEAR HAYLE.

FOR SALE, BY PRIVATE CONTRACT, a 60 in. PUMPING ENGINE, 10 in. in cylinder, 9 ft. in shaft.

50 in. PUMPING ENGINE, 188-horse power, TWO BOILERS, 10 and 12 tons each.
20 in. PUMPING ENGINE, 130-horse power, 11 ft. in shaft, 9 in. cylinder, THREE BOILERS, 29 tons.
ONE 20 in. STAMPING ENGINE, two axles, one wood and one iron, 24 heads.
Pumps; 14 in., 15 in., 16 in. plunger poles, very good, and bottoms; Riga shaft rods, plates, bolts, new capstan rope 10 in., old rope 12 in., bridge rails, and all other necessary materials for a mine. Also a new weighbridge, 6 tons, by Huxham, Exeter, in perfect order, and wood house for clerk.

Apply to THOMAS FIELD, Esq.; or to J. BURGESS, the auctioneer, Barncoose, Redruth.

WHEAL HOPE MINE, IN THE PARISH OF PERRANZABULOE.

MR. H. V. NEWTON, Auctioneer, &c., Camborne, will OFFER, BY AUCTION, in One Lot, on Thursday, the 3d day of May next, at Two o'clock in the afternoon precisely, at the account-house, on the mine, the SETT of the said WHEAL HOPE MINE, together with a 42 in. cylinder STEAM PUMPING ENGINE, with TWO BOILERS; a 22 in. STEAM WHIM, with cage, boiler, &c., complete; a WATER-WHEEL, with 20 heads of stamps, &c.; capstan and shears, capstan rope, whim chain, and 160 fms. 13, 12, and 11 in. pitwork.

The sett is held under the Duchy of Cornwall and J. T. H. Peter, Esq., for 21 years, from 1864, at 1-15th and 1-18th dues.

The sett is extensive, and is situate near West Chiverton Mine. Large quantities of lead have been raised therein, and there is also a large quantity of spathose iron discovered. The sett offers an excellent opportunity for investment.

The whole will be sold subject to the conditions of the leases, which will be produced, and such other conditions as will be read at the sale.

The mine may be inspected until the day of sale on application to Capt. JNO. NICHOLLS, St. George's-road, Truro, of whom any further information may be obtained.

VALUABLE MINING PROPERTY.
TO BE PEREMPTORILY SOLD, BY AUCTION, BY

MR. RICHARDS, by order of the Liquidator, at the Lion Hotel, Wrexham, on Monday, the 7th day of May next, 1866, at Four o'clock in the afternoon, subject to conditions, all that VALUABLE PROPERTY known as the HIRNANT LEAD MINES, situate in the parish of Hirnant, in the county of Montgomeryshire, distant about 18 miles from Oswestry, and within three miles of the Llangunog Railway station, consisting of two mining setts, extending over about 447 acres, held under leases for a term of years, of which 13 are unexpired, together with the MACHINERY, WATER-WHEEL, pumps, engine-house, store-house, smithy, and other necessary effects, suitable for carrying on an extensive mining work.

Also, that newly erected DWELLING-HOUSE, erected at a cost of upwards of £300, with the garden annexed, in the occupation of Capt. Martin, the manager of the mine. This is leasehold far the term of 99 years.

Several very promising lodes of lead and copper have been discovered and proved in these setts, and there is a shaft sunk upon the mine to the depth of 42 yards.

The property may be viewed on application to Captain MARTIN, the manager of the mine, and further particulars will be furnished on applying to CHARLES OLDHAM, Esq., National Provincial Bank, Wrexham; or the auctioneer, at his office, in Wrexham.

COUNTY OF GLAMORGAN.
VALUABLE COLLIERY PROPERTY AND HARBOUR.
PRELIMINARY ANNOUNCEMENT.

MR. THOMAS THOMAS has been instructed to offer FOR SALE, BY PUBLIC AUCTION, in the ensuing months of May or June, at the Mackworth Arms Hotel, Swansea, unless previously disposed of by private contract (of which due notice will be given), subject to conditions of sale to be then produced, all that valuable COLLIERY and COAL FIELD, situate in the parish of LLANRHIDIAN, in the county of GLAMORGAN, known as the LYNCH COLLIERY, containing the well-known Lynch vein, the Farm vein, and two others.

Also the LYNCH HARBOUR, contiguous to the said colliery, at the confluence of the River Morlais with the River Loughor, together with the land, conveniences, and works connected therewith.

And also that one undivided FOURTH SHARE of a valuable COLLIERY, situate in the parishes of LOUGHOR and LLANRHIDIAN, in the county of GLAMORGAN known as the BERRINGTON COLLIERY, containing the well-known Hughes's vein, and three others.

Detailed particulars and plans are now in preparation. In the meantime, for further information, and to treat, application may be made to Mr. GASKOIN, solicitor, Swansea; Mr. H. HUXHAM, mining engineer, Swansea; or to the Auctioneer, at his offices at Swansea and Neath.—Swansea, April, 1866.

TO RAILWAY CONTRACTORS, COLLIERY PROPRIETORS, BUILDERS, AND OTHERS.

MR. JOHN M. LEEDER has been favoured with instructions, from the Contract Corporation (Limited), to SELL, BY PUBLIC AUCTION, at LLANDILO, CARMARTHENSHIRE, on Monday and Tuesday, the 7th and 8th, and at SWANSEA, GLAMORGANSHIRE, on the 9th and 10th of May, 1866, the undermentioned VALUABLE RAILWAY CONTRACTORS' PLANT and MATERIALS:—

LYING AT LLANDILO.—About 250 narrow-gauge earth wagons, with Ashbury's wrought wheels and axles; extra wheels and axles, 80 tons of temporary rails (35 to 42 lbs. per yard), points of crossings, ballast wagons, stone trucks, trollies, 30 dobbin carts, 30 double and single-shafted hand carts, timber carriage, 3 two-horse carts, and Whitechapel dog-cart, 200 barrows, 300 wheeling planks, mortar and pug mills, brickmakers' tables and moulds, double-purchase and other crabs; sheive blocks, chains, ropes, and travelling crane, to lift 8 tons, by Warden and Sons; Samson crane, with crabs, blocks, chains, and gearing; large traveller, by Worsdell; 36 feet pile engine, with crab; chain and monkey, ringing engine and monkey, 2 large Derrick's; 2 wrought-iron girders, 14 feet 9 inches long, 16 inches deep; double-action iron pumps, with piping complete; single ditto, creosoted and other sleepers, 100 balks of timber, large quantity of larch trees and poles, bar-iron and steel earth picks, beaters, bars, screw bolts of various sizes; plate-layers', carpenters', joiners', fitters', and smiths' tools; bellows, anvils, grindstones, &c.; 2 Pooley's 20-cwt. weighing machines, temporary building, firewood, &c.

LYING AT SWANSEA.—About 10 earth wagons, 5 ballast wagons; stone, timber, and rail lorries; timber carriage and carts, portable steam-engine and saw-table complete, mortar mills, creosoting apparatus, double-purchase and other crabs; sheive blocks, chains, ropes, &c.; travelling and jib cranes, wrought-iron standards for wire fencing, rivets, screw bolts, nails, spikes, brads of all sizes, a lot of tram wheels; carpenters', joiners', and smiths' tools, and sundry iron; octagon, blister, and shear steel; 2 horses, and a large quantity of cart and trace harness, &c. Various lots of timber and fire-wood.

Detailed catalogues may be obtained one week previous to the days of sale, on application to the Contract Corporation (Limited), at their offices, No. 27, Cannon-street, London, E.C.; or of the Auctioneer, 16, Caer-street, Swansea.

The sale will commence each day at Eleven o'clock.

UPSET PRICE REDUCED TO £1500.

TO BE SOLD, BY PUBLIC ROUP, within the Faculty Hall, St. George's-place, Glasgow, on Wednesday, the 2d day of May next, at One o'clock afternoon, the LEASE of the MINES and others therein specified, in, under, and upon a certain part of the town and lands of Carrickagarvey and Cornalough, situate in the Barony of Cremorne and County of Monaghan, so far as assigned and belonging to the HOPE SILVER-LEAD MINING COMPANY (LIMITED), together with the MACHINERY, PITWORK, and OTHER MATERIALS at the mine, belonging to the said company.

For further particulars, apply to Mr. JOHN E. WATSON, accountant, Renfield-street; or to Messrs. M'CLURE, NAISMITH, and BRODIE, 87, St. Vincent-street, who will exhibit the titles, inventory of machinery, and articles of roup.—Glasgow, April 18, 1866.

DUCHY OF NASSAU.

Notice of sale as per advertisements in the *Cologne Gazette*.

ON the 20th JUNE next will be put up at PUBLIC AUCTION, at MUNSTER, WESTPHALIA, the EXTENSIVE WORKS, PROPERTY (less Crown right), BUILDINGS, MACHINERY, FOUNDRY, &c., of the copper mine COSTANZ GRUBE, near DILLENBURG. This mine was profitably worked by an English company, several cargoes of ore having been shipped to England at the beginning of this century, but reverted to the Crown, in consequence of the continental blockade.

Mr. EDWARD HUEFFER, Munster, Prussian Westphalia, will be glad to give every information on personal application; or Mr. FRIED CAZIN, director of the Costanz Grube, St. Mauritz, near Munster, Prussian Westphalia.

Munster, 20th April, 1866.

NORWAY.—SEVERAL ELIGIBLE COPPER, SULPHUR, NICKEL, SILVER, and IRON MINES TO BE SOLD, OR LET, on royalty, for a number of years, on good conditions.—Apply, if by letter post paid, to Mr. RICHARD SHARPE, 40, Malvern-road, Dalston; or direct to Messrs. A. SHARPE and Co., Christiania, Norway.

FOR SALE,—ONE CONDENSING PUMPING ENGINE, having Cornish double-beat valves, 50½ in. cylinder, 7 ft. stroke, and 30 ft. beam.
ONE HIGH-PRESSURE VERTICAL WINDING ENGINE, having 22 in. cylinder, 4 ft. stroke, 8 in. wrought-iron shaft, 14 ft. fly-wheel complete, with brake, and two 8 ft. flat-rope drums.
TWO 14 feet HORSE GINS.
ONE DOUBLE POWER CAPSTAN.
ELEVEN BOILER TUBES, 30 ft. long, and 3 ft. 8 in. diameter.
ONE CART WEIGHING MACHINE.
Apply to Mr. P. COOPER, Holmes Colliery, Rotherham.—April 16, 1866.

VALUABLE LEAD MINE AND MACHINERY, NEAR LLANIDLOES, MONTGOMERYSHIRE.—TO BE SOLD, BY TENDER, by order of the Liquidator of the Pen-y-Clyn Mining Company (Limited), the PEN-Y-CLYN LEAD MINE, with its VALUABLE PLANT and MACHINERY, comprising TWO excellent STEAM ENGINES, pumps, drawing gear, tramways, and dressing works, &c., in complete working order. The property is situate about two and a half miles from Llanidloes, to which there is railway transit to all parts of the kingdom. The lease has about 15 years to run, and the royalty is moderate. The mine yielded large profits to the former proprietors, and nearly 1900*l.* has been realised from ores sold within the last two years, and the company is now being wound-up, having exhausted its capital. The Liquidator does not bind himself to accept the highest or any tender.—To view the same, apply to Capt. GOLDSWORTHY, the agent on the mine; and for further particulars apply to S. B. SOMERVILLE, Esq., No. 48, Lincoln's Inn-fields, London, W.C., to whom tenders are to be sent, on or before Wednesday, the 2d May, 1866.

TO BE LET, with immediate possession, for a term of 21 years, a VALUABLE SLATE QUARRY, situated within half a mile of the sea, and six miles from Dartmouth. Can be worked with a small outlay of capital, and offers a good investment for a company, or for a large builder desirous of raising his own roofing and other slate.—For further particulars, apply to Mr. L. J. OLDREIVE, Bridgetown, Totnes, Devon.—April 3, 1866.

CHARLES DAVEY AND CO SAFETY FUSE MANUFACTURERS, ST. HELEN'S JUNCTION, LANCASHIRE.

MR. GEORGE DARLINGTON, CONSULTING MINING ENGINEER (Graduate of the Royal School of Mines), GROVE PARK, WREXHAM.—Mr. DARLINGTON is OPEN to ACCEPT ENGAGEMENTS to REPORT UPON, MODEL, or ARRANGE MINES or MINING WORKS, and from his practical and varied experience in all kinds and classes of mines, both abroad and at home, especially on the Continent, in America, and in Australia, he can confidently offer his services to those who may require faithful reports or examinations of mining properties at home or abroad. Mr. DARLINGTON speaks French and German fluently, and is acquainted with the mining laws of those countries.

MR. D. STICKLAND, M.E., having had upwards of 40 years' mining experience in Cornwall, several years of which he has had the entire management of mines therein, enables him to GIVE GOOD ADVICE thereon.
MINES INSPECTED and faithfully REPORTED ON. DEALER IN MINING, RAILWAY, and OTHER SHARES.
His monthly Circular forwarded on receipt of six postage stamps.
Criddis Mine, St. Issey, Padstow, Cornwall.

NORTH OF ENGLAND MINING AND ENGINEERING OFFICES, MANCHESTER.

MESSRS. HARVEY AND CO., MINING ENGINEERS, AGENTS, AND SHAREDEALERS, CLARENCE CHAMBERS, MANCHESTER, are at all times in a position to deal in all the market Dividend and Progressive Mine shares, and also to advise on all mining matters, being practically acquainted with the business, and having a daily communication from the mining districts of Devon and Cornwall.
Messrs. HARVEY and Co. publish a monthly "Mining Circular," containing a valuable summary of mining information. Subscription, 6s. per year.
Bankers: The Consolidated, Manchester; and the Alliance, Lothbury, London.

MESSRS. HARVEY AND CO., of CLARENCE CHAMBERS, MANCHESTER, are anxious to state that they have NO CONNECTION with HARVEY AND CO., of HAYLE, and recently of Clarence Chambers, London, who supply mine materials.

MR. CHARLES BAWDEN, INSPECTING MINE AGENT, ST. DAY, CORNWALL, OFFERS HIS SERVICES to CAPITALISTS SEEKING to INVEST in *bona fide* MINES.

MANCHESTER, AND WEST END OF LONDON.

MR. W. HANNAM, MINING, SLATE QUARRYING, INSURANCE, AND GENERAL SHAREBROKER,
ROYAL INSURANCE BUILDINGS, KING STREET, MANCHESTER; and 31, REGENT STREET, LONDON, S.W.
INSTANTANEOUS COMMUNICATION with the STOCK and MINING EXCHANGES, avoiding the delay and annoyance of visiting the City to ascertain prices.
A Monthly Investment Circular on application.

MINING OFFICES, MANCHESTER.

THOMAS MOLYNEUX AND CO., MINE AGENTS AND SHAREBROKERS. Reliable information can be obtained as to purchase and sale of shares.
Offices of the Ellen United Copper and Zinc Mining Company (Limited), and Hazel Grove Silver-Lead Mining Company (Limited). THOS. MOLYNEUX, secretary, 28, Princess-street, Manchester.

TO MINE, SLATE QUARRY, AND RAILWAY COMPANIES.—CAPT. C. WILLIAMS is NOW OPEN to UNDERTAKE ALL KINDS of CONTRACTS, such as DRIVING LEVELS, SINKING SHAFTS, CONSTRUCTING WATER COURSES, CANALS, TRAMWAYS, &c., and ERECTING ALL SORTS of MACHINERY for MINING and OTHER PURPOSES, having on hand at all times a first-class staff of miners and machinists, who will proceed to any part of the world upon the shortest notice.
N.B.—In all cases 30 per cent. will be left in hand until the work is complete.
Tyn-y-Wern, Tallesin, via Shrewsbury.

RED LION HOTEL, TRURO.—OLD-ESTABLISHED FIRST-CLASS FAMILY, COMMERCIAL, AND POSTING HOUSE.—In returning thanks to the nobility, gentry, commercial gentlemen, and the public generally for their patronage for many years past, Mrs. DOBB begs to inform them that no effort on her part will be wanting to afford every comfort, and thus obtain a continuation of their support.
Superior accommodation to families, tourists, and mining gentlemen travelling on business or pleasure, at moderate charges. Ladies' and gentlemen's coffee and private sitting-rooms. Table d'hote daily. First-class cooks.
Dog-carts, wagonettes, and carriages of all descriptions. Hearse and mourning-coaches. Excursion and railway omnibuses.
Orders for weddings, funerals, or posting promptly attended to. Stock and show rooms for commercial purposes. An omnibus to meet every train.

FOUNDRY, HAYLE, SEPT. 29, 1865.—SIR: We beg to inform you that, in consequence of our INCREASING BUSINESS in LONDON, we have purchased the HAYLE FOUNDRY WHARF (formerly Crown Wharf), NINE ELMS, where we shall carry on in all their branches the businesses of FOUNDERS and ENGINEERS.

Having by this arrangement provided greater facilities for the dispatch of work confided to us by our friends in London, and being also enabled to extend our business, we are, in addition to the usual Engineering work hitherto undertaken by us, prepared to SUPPLY MINING MACHINERY from this wharf at the shortest notice, where also our resident engineer will be in attendance to give information in designing general plans and details of the most improved machinery for mining and other purposes.

Our offices hitherto at Clarence Chambers, 12, Haymarket, will from this date be transferred to the Hayle Foundry Wharf, Nine Elms, S., where all communications intended for our London branch should be addressed.

We are, Sir, your obedient servants,
HARVEY AND CO.

MR. BRENTON SYMONS INSPECTS and REPORTS on ANY MINERAL PROPERTY. In all cases where procurable a plan willaccompany his report.—18, Hatton-garden, E.C.

SALOM'S NEW OPERA and FIELD GLASS, and the "RECONNOITERER" GLASS, price 10s. 10d., sent free.—This TOURIST'S FAVOURITE, through extraordinary division of labour, distinctly shows small windows 10 miles off, landscapes at 30 miles, Jupiter's moons, &c.—The MARQUIS OF CARMARTHEN: "The reconnoiterer is very good."—The EARL OF BREADALBANE: "I find it all you say, and wonderfully powerful for so very small a glass."—EARL OF CAITHNESS: It is a beautiful glass."—Rev. Lord SCARSDALE "approves of it."—Lord GIFFORD, of Ampney: "Most useful."—Lord GARVAGH: "Remarkably good."—Sir DIGBY CAYLEY, of Brompton: "It gives me complete satisfaction, and is wonderfully good."—Sir W. H. FIELDEN: "I do not think it can be surpassed; it gives great satisfaction."—Capt. SENDEY, Royal Small Arms Factory, Enfield, "found it effective at 1000 yards range."—F. H. FAWKES, of Farnley Hall, Esq.: "I never before, although I have tried many, met a glass combining so much power for its size with so much clearness."—*The Field*: "We have carefully tried it at 800-yard rifle range, and found it fully equal to any of those present, although they had cost more than four times its price."—*Notes and Queries*: "What intending tourist will now start without such an indispensable companion?" The celebrated HYTHE GLASS shows bullet-marks at 1200 yards, and men at 3½ miles; price, 31s. 6d. All the above, respectively bearing the registered trade marks, "Salom," "Reconnoiterer," and "Hythe," are only to be had direct from SALOM and Co., 98, Princess-street, Edinburgh, and 137, Regent-street, London, W.

A few hours will carry a glass to almost the remotest town in the United Kingdom. No agents of any kind anywhere.

FIRE ENGINEERING.

Now ready, with numerous illustrations, diagrams, &c., handsomely printed, 544 pp., demy 8vo., price £1 4s., postage 10d.

FIRES, FIRE-ENGINES, AND FIRE BRIGADES: with a History of Manual and Steam Fire-engines, their Construction, Use, and Management; Remarks on Fire-proof Buildings, and the Preservation of Life from Fire; Statistics of the Fire Appliances in English Towns; Foreign Fire Systems; Hints for the Formation of, and Rules for, Fire Brigades; and an Account of American Steam Fire-engines. By CHARLES F. T. YOUNG, C.E.,

Author of "The Economy of Steam Power on Common Boads," &c.

London: LOCKWOOD and Co., 7, Stationers' Hall Court.

THE CONSERVATIVES AND "LIBERALS:" THEIR PRINCIPLES AND POLICY.

Second Edition, with an Introduction on the REFORM QUESTION, &c. By J. H. MURCHISON, Esq, F.E.G.S.

London: Saunders, Otley, and Co., 66, Brook-street, Hanover-street.

OPINIONS OF THE PRESS ON THE FIRST EDITION.

Mr. Murchison's pamphlet is clever, and will be useful. * * * Mr. Murchison's heart was evidently in his task, and he has accomplished it as men who go to work in that spirit only can do.—Standard.

Mr. Murchison did good service during the last general election by his able and argumentative exposure of the pretensions, fallacies, and clap-traps of the Liberal Candidates. He has now supplemented his former efforts by a timely and well-written pamphlet appropriately elicted by the meeting of the New Parliament. His purpose is to disabuse the public mind as to the righteous and legitimate claim of the Whigs to their self-chosen attribute of Liberal. This purpose he has successfully achieved. * * * Mr. Murchison does a public service in his zeal to wrest from his opponents the use of a popular, but most erroneous, nomenclature.—Press.

Such are the views of the liberality of the Conservatives, and of their predecessors, the old Tories, put forth in an able pamphlet by Mr. J. H. Murchison, a gentleman who took a leading part in the recent election for the eastern division of the county of Surrey.—Aberdeen Journal.

The author makes an excellent exposure of the "Liberals," and gives a just account of the principles and policy of their opponents.—Newcastle Daily Journal.

Now ready, crown 8vo., price 2s. 6d., a Treatise (Dedicated, by permission, to the Right Hon. Lord Berners)

ON THE EXTENSION OF THE ENGLISH COAL FIELDS BENEATH THE SECONDARY FORMATIONS OF THE MIDLAND COUNTIES.

Also,

DOES COAL EXIST NEAR LONDON, GEOLOGICALLY CONSIDERED.

By JOSEPH HOLDSWORTH, Esq., M.G.S., &c., &c.

London: Published at the MINING JOURNAL office, 26, Fleet-street, London, E.C.

Now ready, price 5s., by post 5s. 4d.,

THE MINES OF CORNWALL AND DEVON: STATISTICS AND OBSERVATIONS, for 1865.

By THOMAS SPARGO, Mining Engineer, Stock and Sharebroker, Gresham House, Old Broad-street, London, E.C.

Just published, price One Shilling,

JOINT-STOCK COMPANIES, AND HOW TO FORM THEM: being a second edition of the "HANDY BOOK ON PUBLIC COMPANIES."

By THOMAS TAPPING, Esq., of the Middle Temple, Barrister-at-law, and author of several works on Public Companies' Law, and the Laws and Customs of Mining.

London: MINING JOURNAL Office, 26, Fleet-street, and all booksellers.

Fourth Thousand.

HOPTON'S CONVERSATIONS ON MINES BETWEEN "A FATHER AND SON." Second edition, improved, revised, and enlarged from 112 to 174 pages. Surveying mines with the theodolite and the dial, and also laying workings on plan, illustrated; with numerous plans on ventilation and the working of mines. Price, 2s. 6d.

May be had at the MINING JOURNAL office, 26, Fleet-street, London.

Now ready, price 5s.

FORM OF "TACK-NOTE." OR LICENSE TO EXPLORE FOR MINERALS.

Many enquiries have been made during the past few months for the form of Tack-Note published at the MINING JOURNAL Office, to which the answer "out of print" and "reprinting" has been returned. The form may now be had upon application to the bookseller to whom orders have been given, or will be forwarded direct from our office on receipt of a remittance of 5s. by Post-office order.

London: Published at the MINING JOURNAL office, 26, Fleet-street, E.C.

Now ready, the new and improved edition of

THE MONEYS OF ALL NATIONS: with their Proper Value in English Currency, and the Par Exchange Value of the £ Sterling everywhere. Six copies sent free by post on receipt of two penny stamps.

Address, T. ROBERTS and Co., 8, Crane-court, Fleet-street, London.

THE PRACTICAL MECHANICS' JOURNAL for May (Part 14, Third Series), price 1s., with plate engraving of "Multiple Screw-Cutting Lathe," and twenty-two wood engravings. Original Articles on Some Points of Practice in Iron Founding, Steam and Real Fire-proof Buildings, Recent Improvements in Hydrostatic Presses, Water Supply of Paris, Potez and Thibaut's Boiler Feed, Rifled Cannon—Choice of Grooves, Mr. Bateman's Project for the Water Supply of London.—Recent Patents: Cooling Charcoal—Brinjes; Safety-Valve Regulator, &c.—Riordan; Capsules—Betts. Reviews of Books, Mechanics' Library, Correspondence, Scientific Societies, Marine Memoranda, Monthly Notes, List of Patents, &c.

London: Longmans, Paternoster-row; Editors' Offices (Offices for Patents), 47, Lincoln's Inn-fields.

THE HARDWARE WEEKLY MESSENGER.

CHARLES RYLAND AND SONS' IRON TRADE CIRCULAR AND HARDWARE WEEKLY MESSENGER.

The "Iron Trade Circular" is eminently the business journal of the mining districts and the manufacturers and wholesale dealers in iron. Its information is authentic, unbiassed, and complete, comprising not only the business news of the South and North Staffordshire district, but generally of the entire mining and manufacturing districts of the United Kingdom. It is now proposed to add a collection of special and general information in the interests of the Hardware Trades of Birmingham, Sheffield, and London, to be comprised in a department of the "Iron Trade Circular,' under the head of "The Hardware Weekly Messenger." Subscription:—

One year (post free)	£2 2 0
Half-year (post free)	1 1 0
Quarter of a year (post free)	0 10 6

Payable in advance.

Advertisements and orders to be addressed Union-passage Birmingham.

CHARLES RYLAND AND SONS, Iron and Metal Brokers.

THE COUNTY PAPER.—County advertisements inserted by Authority of the Court of Quarter Sessions.

THE FLINT COUNTY CHRONICLE: A Mining, Agricultural, and General Advertiser for Mold, Flint, Rhyl, Holywell, Northop, Buckley, Hawarden, Saltney, and neighbourhood. The great success which has attended the publication of the "County Chronicle" justifies the proprietors in drawing the attention of advertisers to the special advantages it offers as an advertising medium. For the announcements of auctioneers, public companies, and tradesmen, it is the best in the county, having attained a circulation throughout Flintshire treble that of all the other so-called local papers combined. As a newspaper it contains full and impartial reports of all local events, and devotes particular attention to the mining and oil trade interests of the district—special articles appearing from week to week. Agriculture is not neglected, the latest market reports being a distinctive feature of the paper, together with other matters of interest to the agriculturist. All communications should be addressed "To the Editor," Bromfield Villa, Maesydderwen, Mold.

THE STOCKTON AND HARTLEPOOL MERCURY AND MIDDLESBOROUGH NEWS (published at Hartlepool) is eminently the organ of the Coal, Iron, and Iron Ship-building Trades in the extensive Mining and Maritime District of South Durham and Cleveland, with which it has been closely identified since its origin. The "Mercury" was for years the only newspaper published in South Durham and Cleveland, and is yet the only one published more than once a week. Advertisements to be forwarded to the publisher, Mr. JOHN H. BELL, Southgate, Hartlepool.

PATENT FLEXIBLE TUBING, AND BRATTICE CLOTH FOR MINES, MANUFACTURED BY

ELLIS LEVER,

PATENTEE,

WEST GORTON WORKS, MANCHESTER.

TAVISTOCK IRONWORKS AND STEEL ORDNANCE COMPANY (LIMITED). (LATE GILL AND CO.)

ENGINEERS, IRON AND BRASS FOUNDERS, MANUFACTURERS OF

STEAM ENGINES, BOILERS, AND MACHINERY OF ALL KINDS. CHAINS, SHOVELS, EDGE TOOLS, AND EVERY DESCRIPTION OF CAST AND HAMMERED IRON FOR MINING, MANUFACTURING, RAILWAY, OR AGRICULTURAL PURPOSES.

Machinery sent to all parts of the world.

Foreign mining companies supplied on liberal terms.

RAILWAY CARRIAGE COMPANY (LIMITED) ESTABLISHED 1847.

OLDBURY WORKS, NEAR BIRMINGHAM.

MANUFACTURERS of RAILWAY CARRIAGES and WAGONS, and EVERY DESCRIPTION of IRONWORK.

Passenger carriages and wagons built, either for cash or for payment over a period of years.

RAILWAY WAGONS FOR HIRE.

CHIEF OFFICES,—OLDBURY WORKS, NEAR BIRMINGHAM.

LONDON OFFICES,—6, STOREY'S GATE, GREAT GEORGE STREET, WESTMINSTER.

THE METROPOLITAN RAILWAY CARRIAGE AND WAGON COMPANY (LIMITED), SALTLEY WORKS, BIRMINGHAM.

Successors to Messrs. JOSEPH WRIGHT and SONS.

MANUFACTURERS of RAILWAY CARRIAGES, WAGONS, and RAILWAY IRONWORK of every description.

RAILWAY CARRIAGES and WAGONS built for CASH, or upon DEFERRED PAYMENTS EXTENDING over a period of from THREE to TEN YEARS.

A large number of COAL, IRONSTONE, BALLAST, and other WAGONS to be LET ON HIRE.

MANUFACTORY AND CHIEF OFFICES—SALTLEY WORKS, BIRMINGHAM.

LONDON OFFICES—No. 8, ADAM STREET, ADELPHI, W.C.

THE BEVERLEY IRON AND WAGON COMPANY (LIMITED).

MANUFACTURERS of RAILWAY CARRIAGES and WAGONS, WROUGHT and CAST IRON CARRIAGE and WAGON WHEELS, AXLES, HAMMERED USES, and HEAVY SMITHS' WORK for ENGINEERS, &c. BRASS and IRON FOUNDERS. MAKERS of PORTABLE FARM RAILWAYS, TURNTABLES, CROSSINGS, SWITCHES, &c. AGRICULTURAL MACHINISTS. MANUFACTURERS of FIELD, ROAD, and BARN IMPLEMENTS, PATENT LORRY, CART, and CARRIAGE WHEELS, with WOOD or IRON NAVES. REAPING MACHINES, CLOD CRUSHERS, CORN MILLS, &c. SAW MILL PROPRIETORS. GENERAL TIMBER CONVERTERS for HOME and FOREIGN RAILWAYS, STATIONS, BARRACKS, EXHIBITIONS, &c.

IRONWORKS, BEVERLEY, YORKSHIRE.

JAMES DEWHIRST, Sec.

THE BIRMINGHAM WAGON COMPANY (LIMITED) MANUFACTURE RAILWAY WAGONS of EVERY DESCRIPTION, for HIRE and SALE, by immediate or deferred payments. They have also wagons for hire capable of carrying 6, 8, and 10 tons, part of which are constructed specially for shipping purposes. Wagons in working order maintained by contract.

EDMUND FOWLER, Sec.

WAGON WORKS,—SMETHWICK, BIRMINGHAM.

*** Loans received on Debenture; particulars on application.

London Agent—Mr. E. B. SAVILE, 67, Victoria-street, Westminster, S.W.

HORIZONTAL ENGINES FOR SALE, at very low prices:—One 12 in. cylinder, 24 in. stroke; one 12 in. cylinder, 36 in. stroke; and two 14 in. cylinders, 24 in. stroke. All ready for delivery, and may be had with or without fly-wheels.—Apply to Messrs. E. PAGE and Co., Laurence Pountney-place Laurence Pountney-hill Cannon-street E.C.

FIRST-CLASS PORTABLE ENGINES, of 8 and 10-horse power (with or without link-motion reversing gear), specially adapted for ECONOMY in the CONSUMPTION of FUEL, and READY for IMMEDIATE DELIVERY.—Particulars on application to BADGER and Son, Engineers, Rotherham.

NOTICE.—Notice is hereby given, that the COAL BUSINESS CARRIED ON for many years by Mr. JOS. DUNSTAN will, on and after the 1st March next, be CONTINUED under the FIRM of J. DUNSTAN AND CO. To the above will be ADDED the BUSINESS of GENERAL MERCHANTS, AUCTIONEERS, MINE BROKERS and SHAREDEALERS, MINE PURSERS, COMMISSION AGENTS, ACCOUNTANTS, &c.

J. DUNSTAN and Co. hope, by strict application to all matters of business entrusted to their care, to merit a liberal share of public patronage.—Truro, January 24, 1866.

GALLOWAY'S PATENT CONE TUBES FOR STEAM BOILERS.—The introduction of these vertical taper tubes into the ordinary flued boilers PROMOTES the NECESSARY CIRCULATION of WATER, and thus INCREASES THEIR STRENGTH and DURABILITY.

Their adoption not only adds to the steam-producing power of the flues, but renders the practice of hooping with angle or tee iron rings quite unnecessary.

The tubes have now been in use upwards of 14 years, and above 22,000 are in work in various parts of the country, with the best results.

They can be easily fixed in existing boilers (owing to their taper form) by any boiler maker, but can only be obtained from the patentees, W. and J. GALLOWAY and SONS, Engineers and Boiler Makers, Manchester.

FOR MINING AND SMELTING WORKS.

IMPROVED SYSTEM FOR WASHING ORES, COAL, FURNACE ASHES, &c.

The apparatus is constructed with a due regard to the combination of the greatest working power with the lowest possible cost.

Complete arrangements for the above purposes are erected according to the requirements of the place and the work to be done, and the due performance is guaranteed.—Apply to—

J. J. ENDRES,

WERN IRONWORKS, LLANELLY.

COAL CUTTING MACHINERY.—The WEST ARDSLEY COMPANY having, by recently patented improvements, perfected their coal cutting machinery, worked by compressed air, are NOW READY to MAKE CONTRACTS for the CONSTRUCTION and USE of their MACHINES.

The results of twelve months' experience in the working of these machines, by the West Ardsley Company, have proved most satisfactory, their use being found to CHEAPEN the COST and IMPROVE the average SIZE of the COAL, to LIGHTEN the LABOUR, and also to MODIFY the SANITARY CONDITION of the MINE.

All communications to be made to Messrs. FIRTH, DONISTHORPE, and BOWER, No. 8, Britannia-street, Leeds.

NOTICE.—The WEST ARDSLEY COMPANY, having reason to believe that their patents are being infringed upon, hereby give notice that they will TAKE LEGAL PROCEEDINGS AGAINST ALL PARTIES who may MAKE FOR SALE, or USE ANY MACHINERY in the construction of which any such INFRINGEMENT is MADE.

GUN COTTON FOR BLASTING.—The extended use of this material has enabled the manufacturers to issue a new List, showing a LARGE REDUCTION IN PRICE; and they now beg to call the attention of those interested in MINING and BLASTING OPERATIONS to the GREAT SAVING in TIME and COST which may be effected by the introduction of gun-cotton.

Directions for use and full particulars obtained upon application to

THOMAS PRENTICE AND CO.,

173, FENCHURCH STREET, LONDON; or

GUN COTTON WORKS, STOWMARKET.

Patent Flat and Round Wire and Hemp Ropes, &c.

JOHN AND EDWIN WRIGHT, PATENTEES, CITY OFFICE, 19, LONDON STREET, E.C. ESTABLISHED 1770.

Manufacturers of every description of

IMPROVED PATENT FLAT AND ROUND WIRE ROPES, From the very best quality of charcoal iron and steel wire.

PATENT FLAT AND ROUND HEMP ROPES,

SHIPS' RIGGING, SIGNAL AND FENCING STRAND, LIGHTNING CONDUCTORS, STEAM-PLOUGH ROPES (made from Webster and Horsfall's patent steel), WIRE, HEMP, FLAX, ENGINE YARN, COTTON WASTE, &c

UNIVERSE WORKS, MILLWALL, POPLAR, LONDON.

UNIVERSE WORKS, GARRISON STREET, BIRMINGHAM.

No 2, OSWALD STREET, GLASGOW.

CITY OFFICE, No. 19, LONDON STREET, LONDON.

Swan Rope Works.

GARNOCK, BIBBY, AND CO., CHAPEL STREET, LIVERPOOL,

MANUFACTURERS of FLAT and ROUND HEMP and IRON and STEEL WIRE ROPES for MINING, RAILWAY, and SHIPPING PURPOSES.

MANILLA ROPE of SUPERIOR QUALITY, FIFTY PER CENT. STRONGER and THIRTY PER CENT. CHEAPER than Russian hemp rope.

WIRE ROPE of FIRST QUALITY WIRE, and the HIGHEST STANDARD of STRENGTH.

First Class Silver Medal, Royal Polytechnic Society, Falmouth, 1864.

CREASE'S PNEUMATIC TUNNELLING ENGINE, for SUPERSEDING the SLOW and EXPENSIVE USE of MANUAL LABOUR in SINKING SHAFTS, DRIVING LEVELS, TUNNELLING, &c., is guaranteed to drive through any rock of average hardness at a minimum rate of 1 fm. per diem, and to sink shafts at the rate of 2 fms. in three days.

Mr. CREASE will undertake contracts for sinking shafts, driving levels, &c., at an enormous reduction of time and great saving in cost.

Applications to be addressed (for the present) to the patentee, Mr. E. S. CREASE Tavistock Devon.

International Exhibition, 1862—Prize Medal.

JAMES RUSSELL AND SONS (the original patentees and first makers of wrought-iron tubes), of the CROWN PATENT TUBE WORKS, WEDNESBURY, STAFFORDSHIRE, have been AWARDED PRIZE MEDAL for the "good work" displayed in their wrought-iron tubes and fittings.

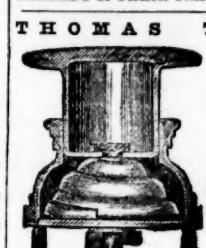
Warehouse, 81, Upper Ground-street, London, S.

BICKFORD'S PATENT SAFETY-FUSE OBTAINED the PRIZE MEDALS at the ROYAL EXHIBITION of 1851, at the INTERNATIONAL EXHIBITION of 1862, in London, and at the IMPERIAL EXPOSITION held in Paris, in 1855.

BICKFORD, SMITH, AND CO. TUCKINGMILL, CORNWALL, MANUFACTURERS of PATENT SAFETY-FUSE, having been informed that the name of their firm has been attached to fuse not of their manufacture, beg to call the attention of the trade and public the following announcement:—

EVERY COIL of FUSE MANUFACTURED by them has TWO SEPARATE THREADS PASSING THROUGH the COLUMN of GUNPOWDER, and BICKFORD, SMITH, AND CO. CLAIM SUCH TWO SEPARATE THREADS as THEIR TRADE MARK.

THOMAS TURTON AND SONS MANUFACTURERS OF



CAST STEEL for PUNCHES, TAPS, and DIES, TURNING TOOLS, CHISELS, &c.

CAST STEEL PISTON RODS, CRANK PINS, CONNECTING RODS, STRAIGHT and CRANK AXLES, SHAFTS and

FORGINGS of EVERY DESCRIPTION.

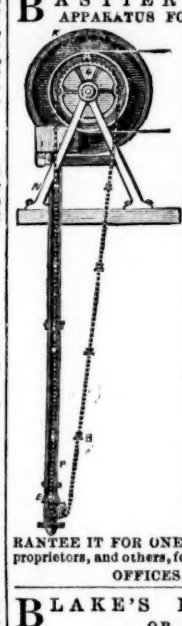
DOUBLE SHEAR STEEL,	FILES MARKED
BLISTER STEEL,	T. TURTON
SPRING STEEL,	EDGE TOOLS MARKED
GERMAN STEEL.	WM. GREAVES & SON

Locomotive Engine, Railway Carriage and Wagon Springs and Buffers.

SHEAF WORKS AND SPRING WORKS, SHEFFIELD.

LONDON WAREHOUSE, 35, QUEEN STREET, CANNON STREET, CITY, E.C., Where the largest stock of steel, files, tools, &c., may be selected from.

BASTIER'S PATENT CHAIN PUMP, APPARATUS FOR RAISING WATER ECONOMICALLY, ESPECIALLY APPLICABLE TO ALL KINDS OF MINES, DRAINAGE, WELLS, MARINE, FIRE, &c.



J. U. BASTIER begs to call the attention of proprietors of mines, engineers, architects, farmers, and the public in general, to his new pump, the cheapest and most efficient ever introduced to public notice. The principle of this new pump is simple and effective, and its action is so arranged that accidental breakage is impossible. It occupies less space than any other kind of pump in use, does not interfere with the working of the shafts, and unites lightness with a degree of durability almost imperishable. By means of this hydraulic machine water can be raised economically from wells o any depth; it can be worked either by steam-engine or any other motive power, by quick or slow motion. The following statement presents some of the results obtained by this hydraulic machine as daily demonstrated by use:—

1.—It utilises from 90 to 92 per cent. of the motive power

2.—Its price and expense of installation is 75 per cent. less than the usual pumps employed for mining purposes.

3.—It occupies a very small space.

4.—It raises water from any depth with the same facility and economy.

5.—It raises with the water, and without the slightest injury to the apparatus, sand mud, wood, stone, and every object of a smaller diameter than its tube.

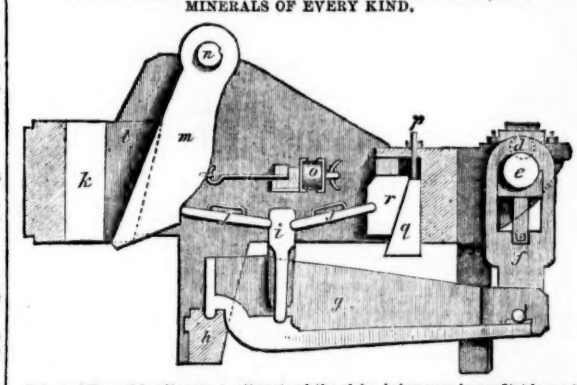
6.—It is easily removed, and requires no cleaning or attention.

BASTIER'S PATENT CHAIN-PUMP may be seen daily in operation at Messrs. SAMUEL BERGER AND Co.'s Patent Rice Starch Works, Bromley-by-Bow, London, E. Cards of admission to be had on application to the inventor and patentee, Mr. J. U. BASTIER, C.E.; or to Messrs. J. JACKSON and Co., Engineers, 17, Gracechurch-street, London.

J. U. BASTIER and Messrs. JACKSON and Co. will CONTRACT to ERECT the PATENT PUMP, and will GUARANTEE IT FOR ONE YEAR, or will grant licenses to manufacturers, mining proprietors, and others, for the use of this Invention.

OFFICES, 17, GRACECHURCH STREET, LONDON.

BLAKE'S PATENT STONE BREAKER, OR ORE CRUSHING MACHINE, FOR REDUCING TO SMALL FRAGMENTS ROCKS ORES, AND MINERALS OF EVERY KIND.



It is rapidly making its way to all parts of the globe, being now in profitable use in California, Washoe, Lake Superior, Australia, Cuba, Chili, Brazil, and throughout the United States and England.

The above section illustrates Blake's Stone Breaker, just as made the last five years and is fully protected in every part by patents.

Extract from Specification:—A short but powerful vibration is imparted to one or both of the jaws by any convenient arrangement, and combination of powerful levers worked by a crank or eccentric on the main shaft.

LEGAL PROCEEDINGS will be taken at once against any person or persons found making, using, or vending any machine, the construction of which will constitute an infringement on the above patent. Read extracts of testimonials:—

Alkali Works, near Wednesbury.—I at first thought the outlay too much for so simple an article, but now think it money well spent. WILLIAM HUNT.

Welsh Gold Mining Company, Dolgelly.—The stone breaker does its work admirably crushing the hardest stones and quartz. WM. DANIEL.

Our 15 by 7 in. machine has broken 4 tons of hard winstone in 20 minutes, for fine road metal, free from dust. Messrs. ORD and MADDISON, Stone and Lime Merchants, Darlington.

Kirkless Hall, near Wigan.—Each of my machines breaks from 100 to 120 tons of limestone or ore per day (10 hours), at a saving of 4d. per ton. JOHN LANCASTER.

Ovoca, Ireland.—My crusher does its work most satisfactorily. It will break 10 tons of the hardest copper ore stone per hour. WM. G. ROBERTS

General Frémont's Mines, California.—The 15 by 7 in. machine effects a saving of the labour of about 30 men, or $75 per day. The high estimation in which we hold your invention is shown by the fact that Mr. Park has just ordered a third machine for this estate. SILAS WILLIAMS.

For circulars and testimonials, apply to—

H. R. MARSDEN, SOHO FOUNDRY, MEADOW LANE, LEEDS.

Only maker in the United Kingdom.

THE NEWCASTLE CHRONICLE AND NORTHERN COUNTIES ADVERTISER. (ESTABLISHED 1764).

Published every Saturday, price 2d., or quarterly 2s. 2d

THE DAILY CHRONICLE AND NORTHERN COUNTIES ADVERTISER.

Published every morning, price 1d.

Offices, 42, Grey-street, Newcastle-upon-Tyne; 50, Howard-street, North Shields, 195, High-street, Sunderland.

NEW MEDICAL GUIDE.

DR. SMITH, who has had twenty years' practical experience in the treatment of Debility, Spermatorrhœa, Disorders of the Nervous System, &c., has published A GUIDE (138 pages) for Self-Cure. Sent to any address on receipt of two stamps. Dr. SMITH may be consulted personally (or by letter) in all private and confidential cases.—Address, SMITH and Co., 8, Burton-crescent, Euston-road, London W.C. Consultations daily from Eleven to Five.

DR. WATSON (of the Lock Hospital), F.R.A.S., Member of the College of Physicians and Surgeons, on the SELF-CURE of NERVOUS and PHYSICAL DEBILITY, Lowness of Spirits, Loss of Appetite, Timidity, Incapacity for Exertion, &c., with means for perfect restoration. Sent free for two stamps by Dr. WATSON, No. 1, South-crescent, Bedford-square, London. Consultations daily from Eleven till Three, and Six till Eight.

Just published, post-free for two stamps,

WONDERFUL MEDICAL DISCOVERY, demonstrating the true causes of Nervous, Mental, and Physical Debility, Lowness of Spirits, Indigestion, Want of Energy, Premature Decline, with plain directions for perfect restoration to health and vigour, WITHOUT MEDICINE. Sent free on receipt of two stamps, by W. HILL, Esq., M.A., Berkeley House, South-crescent, Russell-square, London, W.C.

THE MINING SHARE LIST

BRITISH DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Total divs.	Per Share.	Last paid
200	Botallack (tin, copper), St. Just	91 5 0	—	..	483 15 0	3 0 0	—Aug. 1865
10000	British Slate Company [L.]	7 0 0	—	..	9 per cent.	—	Mar. 1864
1000	Bronfloyd (lead), Cardigan [L. £15]	12 0 0	—	..	7 15 0	0 10 0	—Jan. 1866
1200	Bryn Gwyn (lead), Mold, [L.]	9 0 0	—	..	3 3 6	0 13 6	—Aug. 1865
916	Cargoll (silver-lead), Newlyn	15 5 7	26	20 25	13 15 0	1 0 0	—Feb. 1866
2880	Clifford Amalgamated (cop.), Gwen.	30 0 0	14	9 11	35 6 0	0 10 0	—June 1865
867	Cwm Erfin (lead) Cardiganshire [L.]	7 10 0	—	..	19 18 0	1 0 0	—April, 1866
128	Cwmystwith (lead), Cardiganshire*	60 0 0	—	..	352 10 0	5 0 0	—April, 1866
280	Derwent Mines (sil.-lead), Durham	300 0 0	—	..	162 0 0	2 10 0	—Mar. 1866
1024	Devon Gt. Con. (cop.), Tavist.* [S.E.]	1 0 0	550	..	1017 0 0	9 0 0	—Mar. 1866
358	Dolcoath (copper, tin), Camborne*	128 17 6	..	..	812 10 0	2 0 0	—April, 1866
6000	East Carn Brea (copper), Redruth	3 15 0	—	..	0 5 0	0 5 0	—June, 1865
6144	East Caradon (copper), St. Cleer [S.E.]	2 14 6	8½	7 7½	14 3 0	0 5 0	—Jan. 1866
300	East Darren (lead), Cardiganshire*	32 0 0	—	..	111 10 0	2 0 0	—Mar. 1866
5000	East Rosewarne (cop., tin), Gwinear	2 15 0	—	1⅜ 1⅝	0 10 6	0 1 6	—Jan. 1866
1906	East Wheal Lovell (tin), Wendron	3 9 0	9¼	8 9	2 0 0	0 10 0	—Dec. 1865
2800	Foxdale (lead) Isle of Man [L.]	25 0 0	—	..	68 0 0	0 10 0	—Mar. 1866
5000	Frank Mills (lead), Christow	3 18 6	6	..	3 5 6	0 5 0	—Feb. 1866
5000	Great Laxey (lead), Isle of Man [L.]	4 0 0	22	21¾ 22½	4 5 0	0 10 0	—Mar. 1866
5908	Great Wh. Vor (tin, cp.), Helston [S.E.]	40 0 0	26	22 23	9 10 6	0 13 6	—Mar. 1866
1024	Herodstoot (id.), near Liskeard [S.E.]	8 10 0	39	37 39	36 0 0	1 15 0	—Feb. 1866
6000	Hingston Down (copper), [S.E.]	5 10 6	—	4⅜ 4⅝	0 10 0	0 5 0	—April, 1866
400	Lisburne (lead), Cardiganshire, Wales*	18 15 0	—	..	467 0 0	3 0 0	—April, 1866
9000	Marke Valley (copper), Caradon	4 10 6	4¼	3¾ 4	3 5 0	0 2 6	—Jan. 1866
3000	Minera Boundary (lead), Wrexham [L.]	1 0 0	—	..	0 13 0	0 3 0	—Mar. 1866
1800	Minera Mining Co. [L.], (ld.), Wrexham	25 0 0	—	..	193 3 0	5 10 0	—Feb. 1866
20000	Mining Co. of Ireland (cop., lead, coal)	7 0 0	—	..	19 18 11	0 16 1	—July, 1865
40000	Mwyndy (iron ore) [L. £4] [S.E.]	3 0 0	—	..	0 6 6	0 2 6	—Mar. 1866
6000	New Birch Tor and Vitifer Cons. (tin)	1 6 6	—	..	0 13 0	0 2 0	—Oct. 1865
600	Pant-y-Glien (slate) [L.] [500 £15 pd., 100 £20 pd.]	—	—	..	10 per cent.	—	Mar. 1866
200	Parys Mines (copper), Anglesey [L.]	50 0 0	—	..	157 0 0	5 0 0	—Jan. 1866
1123	Providence (tin), Uny Lelant† [S.E.]	10 6 7	—	28 30	80 7 6	1 0 0	—Feb. 1866
512	South Caradon (cop.), St. Cleer* [S.E.]	1 5 0	—	..	517 10 0	7 0 0	—Mar. 1866
6000	South Darren (lead), [L. £3¼]	3 6 6	3¼	..	0 3 0	0 3 0	—Mar. 1866
6000	Tincroft (cop. tin), Pool, Illogan [S.E.]	9 0 0	14	13½ 14½	18 1 0	1 0 0	—Jan. 1866
6000	West Basset (copper), Illogan [S.E.]	1 10 0	—	1 1¼	26 14 0	0 5 0	—July, 1865
3000	W. Chiverton, (ld.), Perranzabuloe [S.E.]	—	76	67¼ 72½	9 12 6	1 10 0	—Feb. 1866
400	W. Wh. Seton (cop.), Camborne [S.E.]*	47 10 0	135	127½ 132	453 0 0	4 0 0	—April, 1866
512	Wheal Basset (copper), Illogan* [S.E.]	5 2 6	—	..	619 0 0	1 10 0	—April, 1866
1024	Wh. Exmouth (lead), Chrisow	—	—	..	—	0 2 6	—Oct. 1865
1024	Wheal Friendship (copper), Devon	20 0 0	—	..	299 0 0	1 0 0	—May, 1865
4295	Wheal Kitty (tin), St. Agnes	5 4 6	—	..	2 17 6	0 2 6	—Feb. 1866
1024	Wh. Mary Ann (ld.), Menheniot [S.E.]	8 0 0	—	..	59 17 6	0 10 0	—Mar. 1865
2000	Wheal Rose (copper), Scorrier	—	15	..	1 0 0	0 10 0	—Feb. 1866
896	Wheal Seton (tin, copper), Camborne	58 10 0	205	195 205	226 15 0	5 0 0	—April, 1866
1040	Wh. Trelawny (sil.-ld.), Liskeard [S.E.]	5 17 0	—	..	53 15 6	0 10 0	—Mar. 1866
7000	Wicklow (copper) [L.], Wicklow	2 10 0	—	..	15 11 0	0 8 0	—Nov. 1865

[* Dividends paid every two months. † Dividends paid every three months.]

BRITISH MINES WITH DIVIDENDS IN ABEYANCE.

1200	Alderley Edge (cop.), Cheshire [L.]	10 0 0	—	..	11 3 0	0 15 0	—Dec. 1864
3000	Bedford United (copper), Tavistock†	2 6 8	—	..	13 11 6	0 2 6	—Oct. 1864
1248	Boscaswell (tin, copper), St. Just	6 15 0	—	..	1 5 0	0 5 0	—May, 1864
240	Boscean (tin), St. Just	20 10 0	—	..	36 10 0	1 0 0	—Mar. 1862
1600	Brixham Hematite Iron [L. £8]	6 7 6	—	..	0 6 0	0 6 0	—Nov. 1864
1800	Carn Brea (copper, tin), Illogan	19 0 0	—	20 25	280 10 0	2 0 0	—June, 1864
256	Condurrow (cop., tin), Camborne	76 10 0	—	..	85 0 0	2 0 0	—June, 1852
2450	Cook's Kitchen (copper), Illogan	19 8 9	—	..	1 7 0	0 7 0	—May, 1857
1024	Copper Hill (copper), Redruth	12 0 0	—	..	2 7 6	—	—Sept. 1862
42000	Copper Miners of England [2000 £25 paid, 40000 £100 paid.]						
1055	Craddock Moor (copper), St. Cleer	9 17 0	—	..	7 12 0	0 4 0	—June, 1865
12800	Drake Walls (tin, copper), Calstock	2 1 0	—	..	0 18 0	0 1 6	—May, 1863
3000	Dyfngwm (lead), Wales	12 6 6	—	..	0 17 6	0 2 6	—Jan. 1863
512	East Basset (cop.), Redruth [S.E.]*	29 10 0	20	16 18	126 0 0	1 0 0	—Nov. 1864
128	East Pool (tin, copper), Pool, Illogan	24 5 0	—	..	369 10 0	4 0 0	—June, 1864
119	Great Work (tin), Germoe	100 0 0	—	..	15 0 0	5 0 0	—Aug. 1864
10240	Gunnislake (Clitters' Adit) (copper)	4 3 0	—	..	0 3 0	0 1 6	—Mar. 1863
3000	Maes-y-Safn (lead) [L]	20 0 0	—	..	1 0 0	0 1 0	—Oct. 1864
640	Mount Pleasant (lead), Mold	4 0 0	—	..	18 18 1	0 7 6	—Aug. 1862
250	Nanty Mines (lead), Montgomery	20 0 0	—	..	7 0 0	0 1 0	—June, 1864
5938	North Treskerby (copper), St. Agnes	1 9 0	3	2⅝ 2⅞	0 13 0	0 2 6	—Feb. 1864
5000	Orsedd (lead), Flintshire	0 0 8	—	..	0 10 4	0 0 8	—Mar. 1862
1772	Polberro (tin), St. Agnes	15 0 0	—	..	7 19 6	0 10 0	—Nov. 1863
512	Polbreen (tin), St. Agnes	8 0 0	—	..	1 0 0	0 1 0	—July, 1863
512	South Tolgus (cop.), Redruth	9 10 0	5	..	74 10 0	1 0 0	—May, 1863
496	S. Wh. Frances (cop.), Illogan [S.E.]	18 18 9	—	..	370 13 6	1 0 0	—Nov. 1863
4000	St. Day United (tin), Redruth	14 0 0	—	..	0 5 0	0 5 0	—Mar. 1864
940	St. Ives Consols (tin), St. Ives	8 15 0	—	..	490 10 0	0 10 0	—May, 1864
572	Trelyon Consols (tin), St. Ives	15 10 0	—	..	7 0 0	0 10 0	—Sept. 1864
1000	Trumpet Consols (tin), near Helston	11 10 0	—	..	11 0 0	2 0 0	—Mar. 1860
4200	Vigra and Clogan (copper) [L. £5]	5 0 0	—	..	6 2 6	1 10 0	—Mar. 1864
256	West Damsel (copper), Gwennap	38 10 0	—	..	53 10 0	1 0 0	—Mar. 1864
1000	Wheal Basset and Grylls (tin)	7 0 0	4	3¾ 4	3 0 0	0 10 0	—Oct. 1863
1024	Wheal Kitty (tin), Uny Lelant [S.E.]	3 10 6	—	..	10 2 6	0 7 6	—July, 1864
512	Wheal Jane (silver-lead), Kea	8 10 0	14½	..	15 0 0	0 10 0	—Aug. 1864
896	Wheal Margaret (tin), Uny Lelant	13 17 6	—	6	15 0 0	0 10 0	—May, 1863
100	Wheal Mary (tin), Lelant	56 2 6	—	..	76 5 0	1 0 0	—May, 1863
80	Wheal Owles (tin), St. Just, Cornwall	70 0 0	—	..	288 5 0	4 0 0	—Mar. 1864
2044	Wheal Tremayne (tin), Gwinear	6 11 3	—	..	343 3 0	5 0 0	—May, 1864
8000	Wharfedale Mining Company [L. 10s.]	0 5 6	—	..	6 1 3	0 5 0	—Nov. 1863

FOREIGN DIVIDEND MINES.

15000	Cape Copper Mining [L. £10] [S.E.]	7 0 0	11	10⅛ 11	2 12 6	0 10 0	—April, 1866
15000	East Indian Coal, Calcutta [L.]	10 0 0	—	..	—	—	—
25000	Fortuna (lead), Spain [L.] [S.E.]	2 0 0	3¼	2¾ 3¼	1 3 4	0 3 0	—Feb. 1866
10000	Gonnesa (lead) [L.] [5000 £5 paid, 5000 £1 paid]	—	..		7½ per cent. per annum.		
15000	Linares (lead), Spain [L.] [S.E.]	3 0 0	2⅛	1⅛ 2⅛	11 6 4	0 5 0	—Jan. 1865
9275	New Wildberg (lead)	2 0 0	—	..	0 12 0	0 2 0	—Aug. 1865
50000	Panulcillo (copper) [L. £4] [S.E.]	3 0 0	4¼	..	10 per cent.	—	Yearly.
10000	Pontgibaud (sil.-lead), France [S.E.]	20 0 0	8	..	2 19 8	0 16 8	—Dec. 1865
97500	Port Phillip (gold), Clunes [S.E.]	3 0 0	1	⅞ 1	0 14 6	0 1 0	—Jan. 1866
20000	Scottish Australian Mining Co [L. £1]	1 0 0	—	..	0 0 3	0 0 3	—Jan. 1866
11000	St. John del Rey [L.], Brazil [S.E.]	15 0 0	55	53½ 54½	64 15 0	1 0 0	—Dec. 1865
50000	Victoria (London) [L.] [25000 £1 pd., 25000 7s. 6d. pd.]				10 per cent.	—	
40000	West Canada Mining Co. [L.] [S.E.]	1 0 0	—	..	0 19 6	0 2 6	—May, 1865

FOREIGN MINES WITH DIVIDENDS IN ABEYANCE.

10000	Alten and Qusnangen Uni. (cop.) [L. £5]	4 10 0	—	..	4 5 0	0 15 0	—Nov. 1853
20000	Australian (cop.), S. Australia [S.E.]	7 7 6	—	..	0 1 0	0 1 0	—Dec. 1863
2464	Burra Burra (cop.), South Australia	5 0 0	—	..	325 0 0	5 0 0	—Dec. 1864
12000	Cobre Copper Co. (cop.), Cuba [S.E.]	40 0 0	15	13½ 14½	101 0 0	1 0 0	—Jan. 1865
100000	Copiapo Mining Company, Chili [S.E.]	16 0 0	—	..	6 18 0	0 10 0	—Nov. 1862
70000	Don Pedro No. Del Rey [L. £1] [S.E.]	0 14 0	19s.	19s. 23s.	0 0 9	0 0 9	—Dec. 1863
25000	English and Australian	5 0 0	—	1 1¼	1 12 0	0 2 0	—Aug. 1864
68000	Gen. Mining Assoc., Nova Scotia [S.E.]	20 0 0	21	19 21	21 10 0	1 0 0	—June, 1864
10000	Kapunda Mining Co., Australia [S.E.]	1 0 0	—	..	0 12 0	0 1 0	—June, 1864
102815	Lusitanian (Portugal) [S.E.]	2 10 0	—	..	1 7 0	0 3 0	—June, 1865
43174	Mariquita and New Granada [S.E.]	1 0 0	—	..	0 9 6	0 1 6	—July, 1859
10000	Mariquita and New Granada [S.E.]	28 5 0	3	..	2 19 0	0 5 0	—Sept. 1864
10000	Vancouver (coal) [L. £10]	5 0 0	—	..	0 15 0	0 5 0	—Nov. 1864
45000	Yudanamutana (cop.), S.A. [L.] [S.E.]	3 0 0	1¼	⅞ 1⅛	0 5 0	0 5 0	—Aug. 1863

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
35000	Alamillos (lead), Spain] L. £2] [S.E.]	2 0 0	2	1¾ 2	Fully paid.
100000	Anglo-Brazilian (gold) [L. £1] [S.E.]	0 8 0	—	..	Dec. 1863
25000	Capula (silver), Mexico [L. £2] [S.E.]	1 5 0	—	..	Feb. 1864
30000	Chontales (gold and silver), Nicaragua [L. £5]	2 0 0	3¼	2⅞ 3⅛	April, 1866
10000	Copiapo Smelting [L.], Chili	10 0 0	—	..	April, 1866
300	Copper Miners' Co. of S. Australia [L.] [150 £100 p., 150 £70 pd.]	—	—	..	Nov. 1864
75000	Dun Mountain (copper), New Zealand [L.] [S.E.]	1 0 0	—	..	Fully paid.
50000	East del Rey (gold), Brazil [L. £3] [S.E.]	2 10 0	¾	..	Jan. 1866
15000	El Chico Silver Mining and Reduction Company [L. £5]	4 10 0	—	..	Jan. 1866
8000	English and Canadian Mining Company [L.]	5 0 0	—	..	Fully paid.
40000	Fortune (copper), West Australia [L.]	2 0 0	—	..	Fully paid.
50000	Frontino and Bolivia (gold), New Granada [L. £2] [S.E.]	1 5 0	1¼	1¼ 1½	Jan. 1866
10000	Great Barrier Land, Mining, &c., New Zealand [L.]	5 0 0	—	..	June, 1862
24000	Hindostan (copper), Bengal [L. £5]	3 0 0	—	..	Fully paid.
4000	Hope Silver-Lead and Copper Mining Co. [L.], Jamaica	25 0 0	—	..	Feb. 1863
100000	Montes Aureos (gold), Brazil [L.] [S.E.]	2 0 0	—	..	Fully paid.
12200	Nerbadda Coal and Iron [L. £20] [6000 £5 pd., 4000 £3 pd.]	—	—	..	Fully paid.
50000	Nova Scotia (land and gold) [L. £2]	1 0 0	—	..	Aug. 1865
15000	Otea (copper) New Zealand [L. £2] [5000 fully paid]	1 10 0	—	..	Nov. 1862
15000	Pachuca Silver Mining Company, Mexico [L. £1]	1 0 0	—	..	April, 1866
6000	Peel River Land and Mineral [Limited]	100 0 0	—	..	June, 1863
23000	Quebrada (copper), Venezuela [L. £10]	9 10 0	—	..	Stock.
10178	Rhenish Consolidated (lead) [6000 £5 paid, 4178 30s. paid.]	—	—	..	—
50000	Rosas Grande (gold), Brazil [L. £1] [S.E.]	0 5 0	—	..	Mar. 1865
15000	San Pedro del Monte (silver), Mexico [L. £5]	3 0 0	—	..	April, 1864
10000	San Roque (lead), Spain	5 0 0	—	..	Jan. 1866
15000	South Europe Mining Company, Spain [L. £5]	5 0 0	—	..	Fully paid.
30000	Val Antigoria (gold) [L. £2]	0 10 0	—	..	Fully paid.
6000	Val Sassam (silver, copper, and lead) [L. £10]	5 0 0	—	..	—
5000	Valgodemard Mining Company [L. £20]	15 0 0	—	..	April, 1866
50000	Vallanzasca (gold), Italy [L. £1] [S.E.]	0 12 6	—	..	Mar. 1865
45000	Victor Emanuel (copper), Italy [L.]	1 0 0	—	..	Oct. 1864
20000	Washoe (gold) [10000 [L.] £5 paid, 10000 £4 paid]	—	—	4	Fully paid.
6000	Western Africa Malachite (copper) [L.]	110 0 0	—	..	Oct. 1865
87000	Worthiez (copper), South Australia [L.] [S.E.]	1 0 0	—	..	Fully paid.
7500	Yorke Peninsula, South Australia [L.]	1 0 0	—	⅛ ⅛	Fully paid.

PROGRESSIVE MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
1000	Alt-y-Crib (lead) [L.]	5 0 0	—	..	Fully paid
3200	Bedol Aur (lead), Holywell	1 0 0	—	..	Jan. 1866
500	Billins (lead)	30 0 0	—	..	Fully paid.
1000	Blaendyffryn (sil.-lead) [£10]	2 0 0	—	..	Mar. 1866
6000	Bolingey Hill Consols (copper)	0 5 0	—	..	July, 1865
5000	Bottle Hill (tin) Plympton	1 12 6	—	..	Jan. 1866
200	Brynford Hall (lead), Flint	28 0 0	—	..	Jan. 1866
500	Bryn Gwiog (lead), Flint	9 0 0	—	..	June, 1864
30000	Caldbeck Fells (lead) [L. £2]	0 15 0	—	..	Sept. 1865
1000	Camborne Consols (copper)	18 10 0	—	..	Feb. 1864
4600	Camborne Vean & Wh. Francis	11 2 10	11s.	..	12s. 14s. Mar. 1866
8000	Cape Cornwall (cop.), [L. £2 10s.]	2 5 0	—	..	Jan. 1866
12000	Caradon & Phœnix Cons. [L. £1]	0 12 0	—	..	April, 1865
914	Caradon Cons. (cop.), St. Cleer	30 3 6	—	..	Nov., 1865
6000	Carn Camborne (cop.), Cambn.	1 19 0	—	..	April, 1866
4000	Cardigan Consols [L. £5]	4 5 0	—	..	April, 1866
600	Cardiganshire (lead) [L. £20]	10 0 0	—	..	Mar. 1866
2023	Carnyorth (tin), St. Just	5 1 0	—	..	Mar. 1866
20000	Caryafort [3200 £2½ pd., 16800 £1⅛ pd.]	—	—	..	Mar. 1865
6400	Cashwell (lead) [L. £3]	2 10 0	—	..	Jan. 1865
66000	Castell Carn Dochan (gold) [L. £1]	0 8 6	—	..	—
2500	Cefn Cilcen (ld.), Flint [L. £5]	2 15 0	—	..	April, 1866
2500	Central Minera (lead) [L. £5]	3 7 6	—	..	April, 1866
16000	Central Snailbeach (lead)	1 0 0	1⅛	..	Fully paid.
3000	Chiverton (lead), Perranzabu.	7 17 6	7	.. 6 6⅛	Feb. 1866
3000	Chiverton Moor (lead)	4 6 0	5¾	.. 5 5⅛	Feb. 1866
4000	Clara Unit., Ponterwyd [L. £3]	2 10 0	—	..	July, 1865
3072	Cleer's Hill (tin), St. Stephen's	0 1 1	—	..	July, 1864
787	Clijah & Wentworth (tin, cp.)	34 12 0	—	..	Nov. 1865
3000	Clowance Wood (cop.) [L.]	5 0 0	—	..	Fully paid.
16000	Coolartra & Bond [L.] [5300 £1 pd., 10700 16s. pd.]	—	—	..	Feb. 1865
50000	Connorree (cop., sulph.) [L.]	1 0 0	—	..	Fully paid.
6500	Cornish Clay and Tin [L.]	1 0 0	—	..	Fully paid.
861	Crane (copper), Camborne	31 4 6	—	..	Mar. 1866
30000	Crenverand Wh. Abraham [L.]	3 15 0	—	..	Jan. 1866
12000	Crelake (cop.), Tavistock	3 1 0	—	..	Aug. 1865
2500	Crowan Consols (cop.) Crowan	5 11 0	—	..	Dec. 1865
8000	Crowan & Wendron (tin), [L. £1]	0 2 6	—	..	—
1428	Crowlwm (lead), Llanidloes	1 13 0	—	..	Dec. 1864
6000	Cuddra (cop., tin), St. Austell	4 15 6	—	..	Feb. 1866
35000	Dale (lead), North Stafford	1 0 0	6s.	.. 4s. 5s.	Fully paid.
1000	Darren (lead) [L.], Cardigan	9 4 0	—	..	July, 1865
4076	Devon and Cornwall (cop.)	6 6 3	—	..	—
1024	Devon Wheal Lopes (cop.) [L.]	12 0 0	—	..	Dec. 1865
656	Ding Dong (tin), Gulval	48 14 6	—	..	Sept. 1865
20000	Dolfrwyng (gold) [L. £1]	0 15 0	—	..	June, 1864
25000	Dundaik (copper, lead), [L. £1]	0 10 0	—	..	Jan. 1864
1000	Eaglebrook (lead) [L. £20]	17 19 0	—	..	Feb. 1865
1000	East Basset and Grylls (tin)	3 5 0	—	..	July, 1865
6000	E. Bottle Hill (tin), Plympton	0 6 6	—	..	Oct. 1865
4096	East Brookwood, Holne	1 18 8	—	..	Sept. 1864
2000	East Buller (copper)	2 0 0	—	..	Mar. 1865
2000	East Chiverton (lead)	4 3 6	—	..	Jan. 1866
2048	E. Falmouth (s.-ld.), Kenwyn	5 0 6	—	..	April, 1864
6000	E. Grenville (cop.), Camborne	2 19 0	3	.. 2½ 2⅝	Feb. 1866
4000	E. Gunnislake & S. Bedfd. (cop.)	8 12 6	—	..	Nov. 1865
6145	East Jane (sil.-ld.), Cardinham	2 17 6	—	..	April, 1865
6000	East Laxey (lead) [L. £3]	2 10 0	2½	.. 2 2¼	Nov. 1865
8000	E. Polberro (tin) [L. £1] [4000 £1 pd. 4000 12s. 6d. pd.]	—	—	..	Nov. 1864
3986	E. Providence (tin), Uny Lel.	4 12 9	—	..	Jan. 1866
5000	East Treavean	0 10 0	—	..	May, 1865
6000	East Snaefell (lead) [L. £3]	2 0 0	2¼	..	Nov. 1864
5610	East Seton (cop.), Camborne	0 11 0	—	..	Oct. 1865
6000	East St. Just (tin) [L. £5]	3 0 0	—	..	Jan. 1866
6000	East Tamar (silver-lead)	0 6 8	—	..	—
256	East Tolgus (copper), Redruth	96 0 0	—	..	April, 1866
1190	E. Wheal Agar (cop.), St. Cleer	12 17 0	—	..	Jan. 1865
1300	E. Wheal Ellen (cop.) St. Agnes	3 5 0	—	..	Dec. 1864
2048	East Wheal Grylls (tin, cop.)	3 2 6	—	..	Oct. 1865
4000	E. Wh. Russell, Tavis. [S.E.]	11 3 0	—	..	Jan. 1866
6000	East Wheal Vor (tin and cop.)	5 4 0	—	..	Mar. 1866
15000	Ellen Untd. (cop., zinc) [L. £2]	1 0 0	—	..	Nov. 1865
6144	Esther Und. (tin), Cardingham	0 6 3	—	..	July, 1865
100	For. Land and Mineral Rights	145 0 0	—	..	—
6000	Fostescue Consols	0 12 6	—	..	—
940	Fowey Con. (cop.) Tywardreath	4 18 6	—	..	Mar. 1866
6000	Furze Hill Wood Cons., Buckl.	1 16 0	—	..	Feb. 1866
10000	Fursdon (cop.), [L.] [5000 £1 10s. paid]	—	—	..	Mar. 1865
1026	Garden, Morvah (copper)	5 7 9	—	..	Aug. 1864
4096	Garllidna Untd. (tin), Wendron	5 7 7	—	..	Feb. 1866
4000	Gawton (copper), Tavistock	3 5 6	2¾	..	Feb. 1866
6000	Gen. Min. Co. for Irel. (cop.)	4 0 0	—	..	—
5000	Glan Alun (lead), Mold [L.]	1 0 0	—	..	Fully paid.
30000	Glasgow Caradon Con. (cp.) [L.]	1 0 0	—	..	Fully paid.
6000	Godolphin Hill, Breage [L. £4]	1 3 0	—	..	Dec. 1865
2000	Golch Hill (lead), Flintshire	1 13 5	—	..	Sept. 1865
6144	Gonamena (copper), St. Cleer	5 4 0	—	..	April, 1866
6000	Gothic (silver-lead) [L.]	2 10 0	—	..	Fully paid.
486	Gramb. & St. Aub. (cp.) [S.E.]	68 0 0	—	..	Mar. 1865
4100	Great Brigan (cop.), Redruth	6 18 0	—	..	May, 1865
4096	Great Caradon (cop.), St. Ive.	3 4 0	—	..	Jan. 1866
10000	Great Devon and Bedford [L.]	2 10 0	—	..	Mar. 1866
3000	Gt. East Lovell (tin), Helston	1 10 0	—	..	Dec. 1865
5000	Great Mona [L. £5]	2 12 0	—	..	Jan. 1866
5000	Great North Downs (copper)	4 18 0	—	.. 1½ 2	Jan. 1866
40000	Gt. Northern of Ireland [L. £1]	0 10 0	—	..	—
12500	Gt. No. Laxey (I. of Man) [L. £1]	0 10 0	2⅛	.. 1⅞ 2	Feb. 1865
6000	Gt. Retallack (sil.-ld., blende)	2 8 6	—	..	July, 1865
6000	Great S. Chiverton (sil.-lead)	1 7 6	—	..	April, 1866
6000	Gt. So. Tolgus (cop.), Redruth	0 14 6	¾	.. ⅛ ¾	—
3000	Great West Chiverton (lead)	1 0 0	—	..	June, 1864
3313	Great Wheal Baddern (tin)	7 17 8	—	..	June, 1864
6000	Gt. Wh. Busy (cop., tin), Ken.	15 19 6	—	..	Feb. 1866
1798	Gt. Wh. Fortune (tin), Breage	25 2 0	—	.. 1 1¼	Dec. 1865
3072	Gt. Wh. Grylls (tin, copper)	1 12 0	—	..	April, 1866
10000	Great Wh. Metal, Breage [L.]	2 0 0	—	..	May, 1865
6400	Green Hurth (lead) [L. £1]	0 1 0	—	..	—
2500	Grit and Steeple (lead), [L.]	10 0 0	—	..	July, 1864
4000	Grylls Wheal Florence (tin)	1 9 0	—	..	April, 1866
6068	Gwydyr Park Con., Llanrwst	1 11 6	—	..	Feb. 1866
6000	Hallenbeagle (copper)	2 2 6	—	..	April, 1866
6400	Harwood (ld.), Durham [L. £1]	0 6 0	—	.. ¾ ⅞	Sept. 1864
5000	Havan (ld.), Cardigan [L. £5]	4 15 0	—	..	Mar. 1866
7219	Hawkmoor (tin, cop.) Calstock	3 11 6	—	..	Jan. 1866
10000	Hazel Grove (sil.-ld.) [L. £1]	Flint 0 7 6	—	..	—
5000	Hendre (lead), Flint [L. £5]	4 0 0	—	..	April, 1865
6000	Illogan (tin and copper)	0 17 0	—	..	Dec. 1865
96	Kilmorey (lead)	25 5 0	—	..	Feb. 1864
6000	Lady Bertha (cop.) [S.E.]	3 13 0	—	..	Jan. 1866
4500	Lanivet [L. £2] [1500 30s. pd.]	—	—	..	Feb. 1866
3000	Leawood (copper, lead)	1 8 6	—	..	Aug. 1865
1019	Leeds & St. Aubyn (tin, cop.)	19 13 4	—	..	Mar. 1866
963	Lelant Cons. (tin), Uny Lelant	35 0 0	—	..	Mar. 1863
160	Levant (copper, tin), St. Just	2 10 0	—	..	—
4000	Llantwit Vardre (coal), [L. £5]	4 10 0	—	..	May, 1864
2000	Long Rake (lead), Flint	6 15 0	—	..	Jan. 1866
2000	Lower Park (ld.), Denbigh [L.]	3 11 0	—	..	Jan. 1864
6000	Mandlin (copper), Lostwithiel	4 7 0	—	..	May, 1865
4480	Merllyn (lead), Flint	4 1 6	—	..	June, 1864
3000	Minera Western Boundary [L. £1]	0 2 6	—	..	Sept. 1863
4975	Molland (cop.), S. Moulton	3 13 0	—	..	Aug. 1865
1024	Nangiles (tin, copper), Kea	23 15 0	—	.. 6 7	Jan. 1866
4